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1980

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420

480 499

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Pro Cys Arg Leu Phe Phe Arg Val Cys Leu Lys Pro Gly Leu Ser Glu 50 60

Glu Ala Ala Glu Ser Pro Cys Ala Leu Gly Ala Ala Leu Ser Ala Arg 65 70 75 80

Gly Pro Val Tyr Thr Glu Gln Pro Gly Ala Pro Ala Pro Asp Leu Pro 85 90 95

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Arg Leu Ala Ala Gly Gly Arg Gly Pro Gly Thr Phe Ser Ala Gln Ala 145 150 155 160

Pro Gly Ser Cys Ala Ser Arg Xaa Ala Arg Ala Ala Ser Arg Leu Pro 165 170 175

Ser Gly Pro Arg Ala Arg Ala Ser Ala Val Arg Ala Ala Pro Pro Arg 180 185 190

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Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu Val Thr Ile Gln 50 55 60

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Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu Lys Leu Ser Lys Leu Lys 85 90 95

Lys Asn Asp Ser Gly Ile Tyr Tyr Val Gly Ile Tyr Ser Ser Ser Leu 100 105 110

Gln Gln Pro Ser Thr Gln Glu Tyr Val Leu His Val Tyr Glu His Leu 115 120 125

Ser Lys Pro Lys Val Thr Met Gly Leu Gln Ser Asn Lys Asn Gly Thr 130 135 140

Cys Val Thr Asn Leu Thr Cys Cys Met Glu His Gly Glu Glu Asp Val 145 150 155 160

Ile Tyr Thr Trp Lys Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn 165 170 175

Gly Ser Ile Leu Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr

Phe Ile Cys Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro 195 200 205

Ile Leu Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser 210 215 220

Ser Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu 225 230 235 240

Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln Glu 245 250 255

Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu Thr Pro

Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp Thr Ile Pro 275 280 285 His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala Asn Thr Val Tyr 290 295 300

Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn Pro His Ser Leu Leu 305 310 315 320

Thr Met Pro Asp Thr Pro Arg Leu Phe Ala Tyr Glu Asn Val Ile 325 330 335

<210> 60

<211> 84

<212> PRT

<213> Homo sapiens

<400> 60

Met Lys Leu Leu Tyr Leu Phe Leu Ala Ile Leu Leu Ala Ile Glu Glu 1 5 10 15 ·

Pro Val Ile Ser Gly Lys Arg His Ile Leu Arg Cys Met Gly Asn Ser 20 25 30

Gly Ile Cys Arg Ala Ser Cys Lys Lys Asn Glu Gln Pro Tyr Leu Tyr 35 40 45

Cys Arg Asn Cys Gln Ser Cys Cys Leu Gln Ser Tyr Met Arg Ile Ser 50 55 60

Ile Ser Gly Lys Glu Glu Asn Thr Asp Trp Ser Tyr Glu Lys Gln Trp 65 70 75 80

Pro Arg Leu Pro

<210> 61

<211> 223

<212> PRT

<213> Homo sapiens

. <400> 61

Met Lys Phe Val Pro Cys Leu Leu Leu Val Thr Leu Ser Cys Leu Gly
1 5 10 15

Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly Glu Glu 20 25 30

Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met Arg Pro Ser

Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg Val Asp Cys Arg
50 55 60

Asn Thr Asp Gln Thr Tyr Trp Cys Glu Tyr Arg Gly Gln Pro Ser Met 65 70 75 80

Cys Gln Ala Phe Ala Ala Asp Pro Lys Ser Tyr Trp Asn Gln Ala Leu 85 90 95

Gln Glu Leu Arg Arg Leu His His Ala Cys Gln Gly Ala Pro Val Leu 100 105 110 Arg Pro Ser Val Cys Arg Glu Ala Gly Pro Gln Ala His Met Gln Gln 115 120 125

Val Thr Ser Ser Leu Lys Gly Ser Pro Glu Pro Asn Gln Gln Pro Glu 130 135 140

Ala Gly Thr Pro Ser Leu Arg Pro Lys Ala Thr Val Lys Leu Thr Glu 145 150 155 160

Ala Thr Gln Leu Gly Lys Asp Ser Met Glu Glu Leu Gly Lys Ala Lys 165 170 175

Pro Thr Thr Arg Pro Thr Ala Lys Pro Thr Gln Pro Gly Pro Arg Pro
180 185 190

Gly Gly Asn Glu Glu Ala Lys Lys Lys Ala Trp Glu His Cys Trp Lys 195 200 205

Pro Phe Gln Ala Leu Cys Ala Phe Leu Ile Ser Phe Phe Arg Gly 210 215 220

<210> 62

<211> 82

<212> PRT

<213> Homo sapiens

<400> 62

Met Ala Ile Ser Cys Trp Ala Ser Leu Thr Val Lys Ser Leu Tyr Cys
1 5 10 15

Leu Leu Gly Phe Trp Trp Glu Ala Val Ile Ser Ser Asn Glu Leu Pro 20 25 30

Leu Pro Trp Ile Cys Gln Glu Ala Asp Gly Asn Leu Ala Asn Ser Gly
35 40 45

Arg Tyr Gln Ala Pro Ser Ser Ala Pro Val Thr Leu Phe Tyr Thr Cys
50 60

Gly Ser Thr Thr Val Cys Ser Glu Gly Gln Ser Leu Pro Leu Leu Cys
65 70 75 80

Phe Ser

<210> 63

<211> 151

<212> PRT

<213> Homo sapiens

<400> 63

Met Asn Gly Leu Leu Phe Pro His Thr Phe Ile Leu Ser Met Val

Phe Pro Thr Ser Leu Ala Ile Gln Leu Leu Phe Leu Leu Pro Lys Met 20 25 30

Ser Glu His Ser Leu Ser Val Gln Leu Ser Pro His Leu Thr Ser Ser

35		40		45	
Leu Arg Met Phe	Phe Cys Cys		Ser Phe Ser	Ser Tyr	Glu Phe
Leu Cys Tyr Ile 65	Ala Ser Pro	Ser Leu	Arg Leu Ala 75	Phe Leu	His Ser 80
Leu Phe Gln Leu	Thr His Phe 85	e Leu Ser	Pro Asn Leu 90	Val Ser	ser Ser 95
Arg Thr Leu Ile		e Cys Phe 105	Leu Phe Lys	Gln Cys 110	Leu Ala
Lys Arg Gln Glu 115	Trp Gln Ser	Met Asn 120	Thr Gln Ile	Asp Met 125	Arg Ile
Cys Leu Gly Pro	Cys Ile Phe		Ile Leu Ser 140	Ser Ser	Ile Leu.
Leu Asn Glu Phe	e Ile Leu His 150	5			
<pre>&lt;210&gt; 64 &lt;211&gt; 424 &lt;212&gt; PRT &lt;213&gt; Homo sapi &lt;220&gt; &lt;221&gt; SITE &lt;222&gt; (268) &lt;223&gt; Xaa equal &lt;220&gt; &lt;221&gt; SITE &lt;222&gt; (316) &lt;223&gt; Xaa equal &lt;220&gt;</pre>	ls any of the				
<221> SITE <222> (318) <223> Xaa equa	ls any of th	e natural	ly occurring	L-amino	acids
<400> 64 Met Leu Phe Cy 1	s Leu Gly Il 5	e Phe Leu	Ser Phe Tyr	Leu Leu	Thr Val
Leu Leu Ala Cy 2		n Trp Arg 25		Lys Thr	Leu Leu
Val Ala Ile As	p Arg Ala Cy	s Pro Glu 40	Ser Gly His	Pro Arg	Val Leu
Ala Asp Ser Ph 50		r Ser Pro 5	Tyr Glu Gly		Tyr Gly
Ser Phe Glu As 65	n Val Ser Gl 70	y Ser Thr	Asp Gly Leu 75	ı Val Asp	Ser Ala 80
Gly Thr Gly As	p Leu Ser Ty	r Gly Tyr	Gln Gly Arg	g Ser Phe	Glu Pro

					85					90					95	
	Val	Gly	Thr	Arg 100	Pro	Arg	Val	Asp	Ser 105	Met	Ser	Ser	Val	Glu 110	Glu	Asp
	Asp	Tyr	Asp 115	Thr	Leu	Thr	Asp	Ile 120	Asp	Ser	Asp	Lys	Asn 125	Val	Ile	Arg
	Thr	Lys 130	Gln	Tyr	Leu	Tyr	Val 135	Ala	Asp	Leu	Ala	Arg 140	Lys	Asp	Lys	Arg
	Val 145	Leu	Arg	Lys	Lys	Tyr 150	Gln	Ile	Tyr	Phe	Trp 155	Asn	Ile	Ala	Thr	Ile 160
	Ala	Val	Phe	Tyr	Ala 165	Leu	Pro	Val	Val	Gln 170	Leu	Val	Ile	Thr	Tyr 175	Gln
	Thr	Val	Val	Asn 180	Val	Thr	Gly	Asn	Gln 185	Asp	Ile	Cys	Tyr	Tyr 190	Asn	Phe
	Leu	Cys	Ala 195	His	Pro	Leu	Gly	Asn 200	Leu	Ser	Leu	Pro	Cys 205	Val	Ala	Pro
	Ser	Ser 210	Ala	Phe	Asn	Asn	Ile 215	Leu	Ser	Asn	Leu	Gly 220	Tyr	Ile	Leu	Leu
	Gly 225	Leu	Leu	Phe	Leu	Leu 230	Ile	Ile	Leu	Gln	Arg 235	Glu	Ile	Asn	His	Asr 240
	Arg	Ala	Leu	Leu	Arg 245	Asn	Asp	Leu	Cys	Ala 250	Leu	Glu	Cys	Gly	Ile 255	Pro
	Lys	His	Phe	Gly 260	Leu	Phe	Tyr	Ala	Met 265	Gly	Thr	Xaa	Leu	Met 270	Met	Glu
	Gly	Leu	Leu 275		Ala	Cys	Tyr	His 280		Cys	Pro	Asn	Tyr 285	Thr	Asn	Ph€
	Gln	Phe 290	Asp	Thr	Ser	Phe	Met 295		Met	Ile	Ala	Gly 300	Leu	Cys	Met	Let
-	Lys 305	Leu	Tyr	Gln	. Lys	Arg 310	His	Pro	Asp	Ile	Asn 315	Xaa	Ser	Xaa	Tyr	Sei 320
	Ala	Tyr	Ala	. Cys	Leu 325		Ile	Val	Ile	Phe 330	Phe	Ser	Val	Leu	Gly 335	Va.
	Val	Phe	Gly	Lys 340		Asn	Thr	Ala	Phe 345		Ile	Val	Phe	Ser 350	Ile	Ile
	His	Ile	11∈ 355		Thr	Leu	Leu	Leu 360		Thr	Gln	Leu	Tyr 365		Met	Gl <sub>3</sub>
	Arg	370		Leu	ı Asp	Ser	Gly 375		Phe	Arg	Arg	Ile 380		. His	Val	Le
	Tyr		Asp	Cys	: Ile	Arg		. Cys	s Ser	Gly	Ala 395		Leu	Arg	Gly	Pr

His Gly Ala Ala Gly His Gly Gln Arg His Gln Leu Val Ala Gly Cys  ${\tt 405}$ 

## Leu Trp Ala Tyr His Ala Pro Gln 420

```
<210> 65
<211> 290
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (272)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 65
Met Pro Leu Leu Thr Leu Tyr Leu Leu Phe Trp Leu Ser Gly Tyr
Ser Ile Ala Thr Gln Ile Thr Gly Pro Thr Thr Val Asn Gly Leu Glu
Arg Gly Ser Leu Thr Val Gln Cys Val Tyr Arg Ser Gly Trp Glu Thr
Tyr Leu Lys Trp Trp Cys Arg Gly Ala Ile Trp Arg Asp Cys Lys Ile
Leu Val Lys Thr Ser Gly Ser Glu Gln Glu Val Lys Arg Asp Arg Val
Ser Ile Lys Asp Asn Gln Lys Asn Arg Thr Phe Thr Val Thr Met Glu
Asp Leu Met Lys Thr Asp Ala Asp Thr Tyr Trp Cys Gly Ile Glu Lys
                                 105
Thr Gly Asn Asp Leu Gly Val Thr Val Gln Val Thr Ile Asp Pro Ala
        115
Pro Val Thr Gln Glu Glu Thr Ser Ser Ser Pro Thr Leu Thr Gly His
                         135
His Leu Asp Asn Arg His Lys Leu Leu Lys Leu Ser Val Leu Leu Pro
                     150
Leu Ile Phe Thr Ile Xaa Leu Leu Leu Leu Val Ala Ala Ser Leu Leu
                                     170
                 165
Ala Trp Arg Met Met Lys Tyr Gln Gln Lys Ala Ala Gly Met Ser Pro
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185

Glu Gln Val Leu Gln Pro Leu Glu Gly Asp Leu Cys Tyr Ala Asp Leu 195 200 205

Thr Leu Gln Leu Ala Gly Thr Ser Pro Arg Lys Ala Thr Thr Lys Leu 210 215 220

Ser Ser Ala Gln Val Asp Gln Val Glu Val Glu Tyr Val Thr Met Ala 225 230 235 240

Ser Leu Pro Lys Glu Asp Ile Ser Tyr Ala Ser Leu Thr Leu Gly Ala 245 250 255

Glu Asp Gln Glu Pro Thr Tyr Cys Asn Met Gly Xaa Leu Ser Ser Xaa 260 265 270

Leu Pro Gly Arg Gly Pro Glu Glu Pro Thr Glu Tyr Ser Thr Ile Ser 275 280 285 .

Arg Pro 290

<210> 66 <211> 118 <212> PRT

<213> Homo sapiens

<400> 66

Met Pro Gly Pro Ala Ser Pro Ala Gly Trp Phe Leu Leu Leu Tyr
1 5 10 15

Pro Leu Pro Pro Ala Pro Cys Leu Val Pro Trp Gly Ser Pro Pro Gly 20 25 30

Thr Pro Ala Arg Pro Pro Ala Ala Gly His Pro His Arg Leu Pro Ala 35 40 45

Val His Ala Pro Leu Val Gly Asp Leu Ala Pro Pro Cys Pro Leu Thr 50 55 60

Ala Arg Leu Ala Pro Ala Pro Ala Thr Val Ser Asp Phe Ala Pro Trp
65 70 75 80

Ala Arg Ser Pro Asp Ser Cys Ser Ala Ala Asn Ser Trp Gly Leu Leu 85 90 95

Cys His Pro Gly Gly Thr Cys Gln Pro Leu Val Pro Gly Pro Gly Ser

Ala Ser Leu Gly Asp Leu 115

<210> 67

<211> 377

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (164) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (213)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 67

Met Ala Thr Ala Met Asp Trp Leu Pro Trp Ser Leu Leu Phe Ser

1 5 10 15

Leu Met Cys Glu Thr Ser Ala Phe Tyr Val Pro Gly Val Ala Pro Ile 20 25 30

Asn Phe His Gln Asn Asp Pro Val Glu Ile Lys Ala Val Lys Leu Thr 35 40 45

Ser Ser Arg Thr Gln Leu Pro Tyr Glu Tyr Tyr Ser Leu Pro Phe Cys
50 55 60

Gln Pro Ser Lys Ile Thr Tyr Lys Ala Glu Asn Leu Gly Glu Val Leu 65 70 75 80

Arg Gly Asp Arg Ile Val Asn Thr Pro Phe Gln Val Leu Met Asn Ser 85 90 95

Glu Lys Lys Cys Glu Val Leu Cys Ser Gln Ser Asn Lys Pro Val Thr 100 105 110

Leu Thr Val Glu Gln Ser Arg Leu Val Ala Glu Arg Ile Thr Glu Asp 115 120 125

Tyr Tyr Val His Leu Ile Ala Asp Asn Leu Pro Val Ala Thr Arg Leu 130 135 140

Glu Leu Tyr Ser Asn Arg Asp Ser Asp Asp Lys Lys Lys Glu Ser Asp 145 150 155

Ile Lys Trp Xaa Ser Arg Trp Asp Thr Tyr Leu Thr Met Ser Asp Val 165 170 175

Gln Ile His Trp Phe Ser Ile Ile Asn Ser Val Val Val Phe Phe 180 185 190

Leu Ser Gly Ile Leu Ser Met Ile Ile Ile Arg Thr Leu Arg Lys Asp 195 200 205

Ile Ala Asn Tyr Xaa Lys Glu Asp Asp Ile Glu Asp Thr Met Glu Glu 210 215 220

Ser Gly Trp Lys Leu Val His Gly Asp Val Phe Arg Pro Pro Pro Val 225 230 235 240

Pro His Asp Pro Gln Leu Pro Ala Gly Leu Arg His Ser Ala Val Leu 245 250 255

Tyr Asp Pro His Arg His Leu Cys Ser His Ala Trp Asp Ala Val Ala 260 265 270

Leu Gln Pro Gly Ser Ser His Asp His Ser Leu Leu Pro Leu His Val

275 280 285 His Gly Gly Val Trp Arg Ile Phe Cys Trp Pro Ser Val Pro His Phe 295 Lys Arg Pro Ser Val Glu Glu Arg Ser Leu Leu Tyr Gly Asn Ser Val Pro Trp Cys Gly Phe Trp His Leu Leu Arg Ile Glu Leu Leu His Leu Gly Lys Ala Leu Ile Arg Ser Gly Ala Leu Ser His His Gly Gly Ser 345 Ala Val His Val Val Arg Asp Leu Pro Ala Pro Arg Leu Leu Gly Leu Leu Leu Arg Leu Pro Lys Ala Ala Ile 370 375 <210> 68 <211> 55 <212> PRT <213> Homo sapiens <400> 68 Met Trp Phe Leu His Trp Thr Leu Leu Gly Tyr Gly Pro Ala Gln Ile Leu Gly Met Trp Ala Val Ala Pro Leu Lys His Gln Trp Ala Glu Asp 25 Glu Ser Trp Tyr Pro Pro Gly Thr Pro Pro Ser Ala Leu His Phe Thr 40 Cys Asp Pro Gly Thr Ser Tyr <210> 69 <211> 87 <212> PRT <213> Homo sapiens <400> 69 Met Phe Tyr Leu Phe Leu Val Leu Val Leu Pro Leu Leu His Lys 10 Glu Leu Cys Ser Ile Glu Arg Pro Val Tyr Pro Cys Leu Phe Val Ile 20 25 Ser Gly Lys Ser Ser Met Ser Ser Phe Leu Cys Gln Phe Arg Trp Lys 40 Phe Trp Gly Arg Arg Glu Asp Gly Glu Lys Val Gln Asn Lys Ser Met Leu Gly Glu Ile Ser Gln Cys Ser Ala Trp Asp Tyr Tyr Thr Cys Val

70

75

## Ala Ala Leu Lys Leu Gly Leu 85

<210> 70

<211> 576

<212> PRT

<213> Homo sapiens

<400> 70

Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly
1 5 10 15

Gln Gly Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly
20 25 30

Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp 35 40 45 -

Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Gln Ala Glu 50  $\phantom{000}55\phantom{000}$ 

Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro 65 70 75 80

Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys
85 90 95

Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg 100 105 110

Thr Leu Val Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu 115 120 125

His Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser 130 135 140

Thr Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln
165 170 175

Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp 180 185 190

Ser Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys 195 200 205

Leu Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro 210 215 220

Gly Ile Leu Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro 225 230 235 240

Thr Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr
245 250 255

Ser Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu 260 265 270

- Val Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln 275 280 285
- Val Gly Phe Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu 290 295 300
- Gly Arg Gln Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala 305 310 315 320
- Met Leu Asn Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile Ser Pro His 325 330 335
- Gly Leu Glu Ala Arg Cys Asp Ala Ser Ser Phe Glu Ser Val Arg Cys 340 345 350
- Thr Phe Cys Val Asp Ala Gly Val Trp Tyr Tyr Glu Val Thr Val Val 355 360 365
- Thr Ser Gly Val Met Gln Ile Gly Trp Ala Thr Arg Asp Ser Lys Phe 370 375 380
- Leu Asn His Glu Gly Tyr Gly Ile Gly Asp Asp Glu Tyr Ser Cys Ala 385 390 395 400
- Tyr Asp Gly Cys Arg Gln Leu Ile Trp Tyr Asn Ala Arg Ser Lys Pro 405 410 415
- His Ile His Pro Cys Trp Lys Glu Gly Asp Thr Val Gly Phe Leu Leu 420 425 430
- Asp Leu Asn Glu Lys Gln Met Ile Phe Phe Leu Asn Gly Asn Gln Leu 435 440 445
- Pro Pro Glu Lys Gln Val Phe Ser Ser Thr Val Ser Gly Phe Phe Ala 450 455 460
- Ala Ala Ser Phe Met Ser Tyr Gln Gln Cys Glu Phe Asn Phe Gly Ala 465 470 475 480
- Lys Pro Phe Lys Tyr Pro Pro Ser Met Lys Phe Ser Thr Phe Asn Asp 485 490 495
- Tyr Ala Phe Leu Thr Ala Glu Glu Lys Ile Ile Leu Pro Arg His Arg 500 505 510
- Arg Leu Ala Leu Leu Lys Gln Val Ser Ile Arg Glu Asn Cys Cys Ser 515 520 525
- Leu Cys Cys Asp Glu Val Ala Asp Thr Gln Leu Lys Pro Cys Gly His 530 535 540
- Ser Asp Leu Cys Met Asp Cys Ala Leu Gln Leu Glu Thr Cys Pro Leu 545 550 555
- Cys Arg Lys Glu Ile Val Ser Arg Ile Arg Gln Ile Ser His Ile Ser 565 570 575

<210> 71

<211> 384

<212> PRT

<213> Homo sapiens

<400> 71

Met Ala Arg Ala Leu Val Gln Leu Trp Ala Ile Cys Met Leu Arg Val 1 5 10 15

Ala Leu Ala Thr Val Tyr Phe Gln Glu Glu Phe Leu Asp Gly Glu His
20 25 30

Trp Arg Asn Arg Trp Leu Gln Ser Thr Asn Asp Ser Arg Phe Gly His
35 40 45

Phe Arg Leu Ser Ser Gly Lys Phe Tyr Gly His Lys Glu Lys Asp Lys 50 55 60

Gly Leu Gln Thr Thr Gln Asn Gly Arg Phe Tyr Ala Ile Ser Ala Arg
65 70 75 80

Phe Lys Pro Phe Ser Asn Lys Gly Lys Thr Leu Val Ile Gln Tyr Thr 85 90 95

Val Lys His Glu Gln Lys Met Asp Cys Gly Gly Gly Tyr Ile Lys Val 100 105 110

Phe Pro Ala Asp Ile Asp Gln Lys Asn Leu Asn Gly Lys Ser Gln Tyr 115 120 125

Tyr Ile Met Phe Gly Pro Asp Ile Cys Gly Phe Asp Ile Lys Lys Val 130 135 140

His Val Ile Leu His Phe Lys Asn Lys Tyr His Glu Asn Lys Lys Leu 145 150 155 160

Ile Arg Cys Lys Val Asp Gly Phe Thr His Leu Tyr Thr Leu Ile Leu 165 170 175

Arg Pro Asp Leu Ser Tyr Asp Val Lys Ile Asp Gly Gln Ser Ile Glu 180 185 190

Ser Gly Ser Ile Glu Tyr Asp Trp Asn Leu Thr Ser Leu Lys Lys Glu 195 200 205

Thr Ser Pro Ala Glu Ser Lys Asp Trp Glu Gln Thr Lys Asp Asn Lys 210 215 220

Ala Gln Asp Trp Glu Lys His Phe Leu Asp Ala Ser Thr Ser Lys Gln 225 230 235 240

Ser Asp Trp Asn Gly Asp Leu Asp Gly Asp Trp Pro Ala Pro Met Leu 245 250 255

Gln Lys Pro Pro Tyr Gln Asp Gly Leu Lys Pro Glu Gly Ile His Lys 260 265 270

Asp Val Trp Leu His Arg Lys Met Lys Asn Thr Asp Tyr Leu Thr Gln 275 280 285

Tyr Asp Leu Ser Glu Phe Glu Asn Ile Gly Ala Ile Gly Leu Glu Leu

	290					295					300				
Trp 305	Gln	Val	Arg	Ser	Gly 310	Thr	Ile	Phe	Asp	Asn 315	Phe	Leu	Ile	Thr	Asp 320
Asp	Glu	Glu	Tyr	Ala 325	Asp	Asn	Phe	Gly	Lys 330	Ala	Thr	Trp	Gly	Glu 335	Thr
Lys	Gly	Pro	Glu 340	Arg	Glu	Met	Asp	Ala 345	Ile	Gln	Ala	Lys	Glu 350	Glu	Met
Lys	Lys	Ala 355	Arg	Glu	Glu	Glu	Glu 36,0	Glu	Glu	Leu	Leu	Ser 365	Gly	Lys	Ile
Asn	Arg 370	His	Glu	His	Tyr	Phe 375	Asn	Gln	Phe	His	Arg 380	Arg	Asn	Glu	Leu
															•
	0> 7: 1> 3:														
<211> 341 <212> PRT <213> Homo sapiens															
<22 <22	<pre>&lt;220&gt; &lt;221&gt; SITE &lt;222&gt; (51) &lt;223&gt; Xaa equals any of the naturally occurring L-amino</pre>													acio	ds
<22	1> S 2> (	67)	qual	s an	y of	the	nat	ural	ly o	ccur	ring	L-a	mino	aci	ds

Met Val Pro Ala Ala Gly Ala Leu Leu Trp Val Leu Leu Leu Asn Leu

Gly Pro Arg Ala Ala Gly Ala Gln Gly Leu Thr Gln Thr Pro Thr Glu

Met Gln Arg Val Ser Leu Arg Phe Gly Gly Pro Met Thr Arg Ser Tyr

Arg Ser Xaa Ala Arg Thr Gly Leu Pro Arg Lys Thr Arg Ile Ile Leu

Glu Asp Xaa Asn Asp Ala Met Ala Asp Ala Asp Arg Leu Ala Gly Pro

Ala Ala Ala Glu Leu Leu Ala Ala Thr Val Ser Thr Gly Phe Ser Arg

Ser Ser Ala Ile Asn Glu Glu Asp Gly Ser Ser Glu Glu Gly Val Val

Ile Asn Ala Gly Lys Asp Ser Thr Ser Arg Glu Leu Pro Ser Ala Thr 120

90

31

<400> 72

Pro Asn Thr Ala Gly Ser Ser Ser Thr Arg Phe Ile Ala Asn Ser Gln 130 135 140

Glu Pro Glu Ile Arg Leu Thr Ser Ser Leu Pro Arg Ser Pro Gly Arg 145 150 . 155 160

Ser Thr Glu Asp Leu Pro Gly Ser Gln Ala Thr Leu Ser Gln Trp Ser 165 170 175

Thr Pro Gly Ser Thr Pro Ser Arg Trp Pro Ser Pro Ser Pro Thr Ala 180 185 190

Met Pro Ser Pro Glu Asp Leu Arg Leu Val Leu Met Pro Trp Gly Pro 195 200 205

Trp His Cys His Cys Lys Ser Gly Thr Met Ser Arg Ser Arg Ser Gly 210 215 220

Lys Leu His Gly Leu Ser Gly Arg Leu Arg Val Gly Ala Leu Ser Gln 225 230 235 240

Leu Arg Thr Glu His Lys Pro Cys Thr Tyr Gln Gln Cys Pro Cys Asn 245 250 255

Arg Leu Arg Glu Glu Cys Pro Leu Asp Thr Ser Leu Cys Thr Asp Thr 260 265 270

Asn Cys Ala Ser Gln Ser Thr Thr Ser Thr Arg Thr Thr Thr Pro 275 280 285

Phe Pro Thr Ile His Leu Arg Ser Ser Pro Ser Leu Pro Pro Ala Ser 290 295 300

Pro Cys Pro Ala Leu Ala Phe Trp Lys Arg Val Arg Ile Gly Leu Glu 305 310 315 320

Asp Ile Trp Asn Ser Leu Ser Ser Val Phe Thr Glu Met Gln Pro Ile 325 330 335

Asp Arg Asn Gln Arg

<210> 73

<211> 246

<212> PRT

<213> Homo sapiens

<400> 73

Met Ala Leu Leu Cys Leu Val Cys Leu Thr Ala Ala Leu Ala His

1 5 10 15

Gly Cys Leu His Cys His Ser Asn Phe Ser Lys Lys Phe Ser Phe Tyr 20 25 30

Arg His His Val Asn Phe Lys Ser Trp Trp Val Gly Asp Ile Pro Val

Ser Gly Ala Leu Leu Thr Asp Trp Ser Asp Asp Thr Met Lys Glu Leu 50 55 60

His Leu Ala Ile Pro Ala Lys Ile Thr Arg Glu Lys Leu Asp Gln Val 65 70 75 80

Ala Thr Ala Val Tyr Gln Met Met Asp Gln Leu Tyr Gln Gly Lys Met 85 90 95

Tyr Phe Pro Gly Tyr Phe Pro Asn Glu Leu Arg Asn Ile Phe Arg Glu
100 105 110

Gln Val His Leu Ile Gln Asn Ala Ile Ile Glu Ser Arg Ile Asp Cys 115 120 125

Gln His Arg Cys Gly Lys Gln Gly Ser Val Gln Ala Glu Gly Arg Ala 130 135 140

Gly Gly Ser Ser Gly Pro Trp Arg Leu Arg Gly Ala Leu Ala Ala Leu 145 150 155 160

Val Arg Val Ser Gly Ile Phe Gln Tyr Glu Thr Ile Ser Cys Asn Asn 165 170 175

Cys Thr Asp Ser His Val Ala Cys Phe Gly Tyr Asn Cys Glu Ser Ser 180 185 190

Ala Gln Trp Lys Ser Ala Val Gln Gly Leu Leu Asn Tyr Ile Asn Asn 195 200 205

Trp His Lys Gln Asp Thr Ser Met Ser Leu Val Ser Pro Ala Leu Arg 210 215 220

Cys Leu Glu Pro Pro His Leu Ala Asn Leu Thr Leu Glu Asp Ala Ala 225 230 235 240

Glu Cys Leu Lys Gln His 245

<210> 74

<211> 153

<212> PRT

<213> Homo sapiens

<400> 74

Met His Trp Leu Cys Val Ser Cys Ile Phe Thr Cys Leu Pro Gly Trp 1 5 10 15

Arg Pro Ala Ala Pro Asp Gln Gly Pro Ala Ala Ile Ser Leu Cys Ser 20 25 30

Leu Pro Ser Ser Ser Gln Gly His Arg Glu Pro Leu Ala Leu Gly Leu 35 40 45

Pro Ser Ala Leu Pro Pro Ala His Arg Gln Arg Leu Arg Gly Ser Ala 50 55 60

Thr Cys Gln Ala Gln Gly Lys Gln Arg Arg Val Gly Gly Arg Thr Arg
65 70 75 80

Leu Leu Gly Arg Gln Glu Trp Gly Val Ala Ser His Pro Thr Gly Gly
85 90 95

Asp Gly Gly Met Pro Gly Ala Met Pro Glu Gln Gly Arg Gly Leu 100 105 110

Val Gln Pro Val Ala Val Ser Ser Arg Trp Asp Arg Gly His Ser Lys 115 120 125

Ala Lys Gly Val Gly Arg Ala Gly Gly Val Ser Leu Val Leu Ala Glu 130 135 140

Leu Pro Val Pro Thr Thr Ser Val Cys 145 150

<210> 75

<211> 458

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 75

Met Lys Val Trp Gly Leu Ala Ala Cys Phe Leu Leu Gln His His 1 5 10 15

Gly Met Pro Ala Gln Phe Thr Leu Pro Pro Ala Pro Arg Asp Glu Thr 20 25 30

Ser Pro Ala Asp Ala Val Cys Pro Gly Leu Gly Arg Asp Leu Cys Gly 35 40 45

Ser Ser Arg Cys Cys Leu Arg Pro Pro Ser Gln Pro Asp Trp Lys Glu
50 55 60

Pro Ser Gly Ala Xaa Cys Gly Pro Asp Arg Leu Arg Val Ala Gly Glu 65 70 75 80

Val His Arg Phe Arg Thr Ser Asp Val Ser Gln Ala Thr Leu Ala Ser 85 90 95

Val Ala Pro Val Phe Thr Val Thr Lys Phe Asp Lys Gln Gly Asn Val

Thr Ser Phe Glu Arg Lys Lys Thr Glu Leu Tyr Gln Glu Leu Gly Leu 115 120 125

Gln Ala Arg Asp Leu Arg Phe Gln His Val Met Ser Ile Thr Val Arg 130 135 140

Asn Asn Arg Ile Ile Met Arg Met Glu Tyr Leu Lys Ala Val Ile Thr 145 150 155 160

Pro Glu Cys Leu Leu Ile Leu Asp Tyr Arg Asn Leu Asn Leu Glu Gln
165 170 175

Trp Leu Phe Arg Glu Leu Pro Ser Gln Leu Ser Gly Glu Gly Gln Leu
180 185 190

Val Thr Tyr Pro Leu Pro Phe Glu Phe Arg Ala Ile Glu Ala Leu Leu

200 205 195 Gln Tyr Trp Ile Asn Thr Leu Gln Gly Lys Leu Ser Ile Leu Gln Pro Leu Ile Leu Glu Thr Leu Asp Ala Leu Val Asp Pro Lys His Ser Ser 230 Val Asp Arg Ser Lys Leu His Ile Leu Leu Gln Asn Gly Lys Ser Leu Ser Glu Leu Glu Thr Asp Ile Lys Ile Phe Lys Glu Ser Ile Leu Glu Ile Leu Asp Glu Glu Glu Leu Leu Glu Glu Leu Cys Val Ser Lys Trp 280 Ser Asp Pro Gln Val Phe Glu Lys Ser Ser Ala Gly Ile Asp His Ala -295 Glu Glu Met Glu Leu Leu Glu Asn Tyr Tyr Arg Leu Ala Asp Asp 310 315 Leu Ser Asn Ala Ala Arg Glu Leu Arg Val Leu Ile Asp Asp Ser Gln Ser Ile Ile Phe Ile Asn Leu Asp Ser His Arg Asn Val Met Met Arg 345 Leu Asn Leu Gln Leu Thr Met Gly Thr Phe Ser Leu Ser Leu Phe Gly 355 Leu Met Gly Val Ala Phe Gly Met Asn Leu Glu Ser Ser Leu Glu Glu 375 Asp His Arg Ile Phe Trp Leu Ile Thr Gly Ile Met Phe Met Gly Ser Gly Leu Ile Trp Arg Arg Leu Leu Ser Phe Leu Gly Arg Gln Leu Glu Ala Pro Leu Pro Pro Met Met Ala Ser Leu Pro Lys Lys Thr Leu Leu 420 Ala Asp Arg Ser Met Glu Leu Lys Asn Ser Leu Arg Leu Asp Gly Leu Gly Ser Gly Arg Ser Ile Leu Thr Asn Arg <210> 76 <211> 164 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (154)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 76

Met Arg Leu Leu Arg Arg Arg His Met Pro Leu Arg Leu Ala Met Val 1 5 10 15

Gly Cys Ala Phe Val Leu Phe Leu Phe Leu His Arg Asp Val Ser 20 25 30

Ser Arg Glu Glu Ala Thr Glu Lys Pro Trp Leu Lys Ser Leu Val Ser 35 40 45

Arg Lys Asp His Val Leu Asp Leu Met Leu Glu Ala Met Asn Asn Leu 50 55 60

Arg Asp Ser Met Pro Lys Leu Gln Ile Arg Ala Pro Glu Ala Gln Gln 65 70 75 80

Thr Leu Phe Ser Ile Asn Gln Ser Cys Leu Pro Gly Phe Tyr Thr Pro 85 90 95 .

Ala Glu Leu Lys Pro Phe Trp Glu Arg Pro Pro Gln Asp Pro Asn Ala 100 105 110

Pro Gly Ala Asp Gly Lys Ala Phe Gln Lys Ser Lys Trp Thr Pro Leu 115 120 125

Glu Thr Gln Glu Lys Glu Glu Gly Tyr Lys Lys His Cys Phe Asn Ala 130 135 140

Phe Ala Ser Asp Arg Ile Ser Leu Gln Xaa Ser Leu Gly Pro Asp Thr 145 150 150 155

Arg Pro Pro Glu

<210> 77

<211> 90

<212> PRT

<213> Homo sapiens

<400> 77

Met Ala Leu Arg His Leu Ala Leu Leu Ala Gly Leu Leu Val Gly Val
1 5 10 15

Ala Ser Lys Ser Met Glu Asn Thr Ala Gln Leu Pro Glu Cys Cys Val 20 25 30

Asp Val Val Gly Val Asn Ala Ser Cys Pro Gly Ala Ser Leu Cys Gly
35 40 45

Pro Gly Cys Tyr Arg Arg Trp Asn Ala Asp Gly Ser Ala Thr Ala Ser 50 55 60

Ala Val Gly Thr Glu Pro Ser Gln Pro Thr Thr Ala Pro Ser Val Glu 65 70 75 80

Ala Leu Leu Ala Arg Val Arg His Ser Pro 85 90

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<211> 44
 <212> PRT
 <213> Homo sapiens
 <400> 78
Met Gly Trp Leu Trp Leu Glu Leu Leu Gly Leu Ser Ile Glu Glu Thr
Leu Val Trp Ala Phe Leu Asn Lys Phe Leu Asp Ser Ser Ala Ala Leu
Leu Trp Arg Ile Leu Gly Lys Ser Asn Leu Ser Thr
                             40
 <210> 79
 <211> 47
 <212> PRT
 <213> Homo sapiens
 <400> 79
Met Glu Arg Pro Ala Ser Leu Trp Ala Ser Val Ser Ile Leu Phe Thr
 Ser Trp Gly Leu Ala Leu Pro Ser Leu Gln Val Ala Ser Leu Ser Asp
                                  25
Ser Ser Pro His Pro Pro Leu Leu Gly Pro Ser Arg Pro Ile Arg
                              40
 <210> 80
 <211> 55
 <212> PRT
<213> Homo sapiens
 <400> 80
Met Pro Arg Trp Leu Ser Leu Leu Ala Leu Thr Ser Leu Thr Gly Ile
Leu Ser Gly Thr Leu Gly Phe Ser Pro His Gly Trp Ser Ser Pro Arg
                                  25
Arg His Leu Ser Pro Arg Pro Glu Cys Pro Ala Ala Ser Gln Thr Thr
                              40
 Cys Lys Ser Leu Gly Gln His
      50
 <210> 81
 <211> 52
 <212> PRT
 <213> Homo sapiens
 <400> 81
 Met Gly Pro Cys Arg Ala Ser Arg Cys Leu Ser Leu Leu Val Leu Phe
```

Pro Pro Gly Val Ala Gly Arg Pro Ala Pro Gly Arg Leu His Pro Val

```
Pro Thr Gly Pro Leu Pro Arg Met Tyr Ser Ala Gly Ala Arg Gly Arg 35 40 45
```

His Gly Ala His 50

<210> 82

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 82

Met Ala Gly Arg Arg Leu Asn Leu Arg Trp Ala Leu Ser Val Leu Xaa 1 10 15

Val Leu Leu Met Ala Glu Thr Val Ser Gly Thr Arg Gly Ser Ser Thr 20 25 30

Gly Ala His Ile Ser Pro Gln Phe Pro Ala Ser Gly Val Asn Gln Thr 35 40 45

Pro Val Val Asp Val Thr Trp Ala Cys Met Cys Ser Met Trp Ser Leu 50 55 60

<210> 83

<211> 81

<212> PRT

<213> Homo sapiens

<400> 83

Met Ser Leu Thr Val Phe His Phe Leu Leu Leu Ala Leu Leu Pro Ile 1 5 10

Ser Leu Met Ser Thr Leu Gln Ser Ile Phe Arg Asn Ser Asp Thr Leu 20 25 30

Ile Ile Glu Ala Ala Asp Phe Val Pro Val Arg Phe Leu Asn Gln Trp 35 40 45

Phe Met Ile Pro Val Asp Ile Ser Ser Leu Ser Lys Leu Gly Val Ser 50 55 60

Lys Leu Phe Leu Leu Arg Ala Arg Gln Tyr Gln Ala Trp Gly Thr Ala 65 70 75 80

Ser

50

```
<211> 43
<212> PRT
<213> Homo sapiens
<400> 84
Met Arg Ser Asp Gly Phe Ile Arg Thr Phe Cys Phe Gly Ile Phe Leu
                                      10
Ile Phe Leu Leu Leu Ser Leu Cys Lys Lys Cys Leu Leu Pro Pro Ala
Met Ile Leu Arg Pro Pro Ser His Val Glu Leu
<210> 85
 <211> 63
 <212> PRT
<213> Homo sapiens
<220>
<221> SITE
 <222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
 <220>
<221> SITE
 <222> (52)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 85
Met Glu Cys Gly Leu Pro Lys Phe Ala Gly Cys Leu Phe Met Ile Leu
 Cys Leu Trp Asn Cys Pro Glu Ala Met Glu Cys Glu Asp Gly Phe His
                                  25
 Cys Ser Ser Val Gly Leu Leu Val Phe Ala Ser Ile Phe Tyr Asn Lys
Lys Xaa Glu Xaa Cys Trp Ile Ile Gln Gly Tyr Ile Leu Ala Ser
 <210> 86
 <211> 76
 <212> PRT
 <213> Homo sapiens
 Met Leu Ile Pro Gly Phe Leu Leu Pro Val Val Thr Leu Leu Ser Thr
 Ala Ser Ile Thr Gly Ala Leu Gly Leu Asn Thr Ser Ala Ile Ser Pro
 Phe Val Ser Ser Met Asp Thr Val Asn Asn Gly Leu Ser Thr Pro Ala
 Leu Cys Gln Ser Gln Gly Val Gly Trp Gly Asp Thr Glu Glu Asn Ile
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55

Phe Leu Leu Asp Ala Cys Cys Ala Asn Ser Pro Leu 65 70 75

<210> 87

<211> 163

<212> PRT

<213> Homo sapiens

<400> 87

Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala Leu Cys

1 10 15

Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys Ala Ala 20 25 30

Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly Thr Ala.-35 40 45

Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly Phe Gly 50 55 60

Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln Ser Asn 65 70 75 80

Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu Gly Cys 85 90 95

Leu Arg Thr Arg Trp Ala Ser Val Leu Met Leu Leu Ser Ser Leu Val
100 105 110

Ser Leu Ala Gly Ser Val Tyr Leu Ala Trp Ile Leu Phe Phe Val Leu 115 120 125

Tyr Asp Phe Cys Ile Val Cys Ile Thr Thr Tyr Ala Ile Asn Val Ser 130 135 140

Leu Met Trp Leu Ser Phe Arg Lys Val Gln Glu Pro Gln Gly Lys Ala 145 150 155 160

Lys Arg His

<210> 88

<211> 53

<212> PRT

<213> Homo sapiens

<400> 88

Met Gln Pro Trp Ala Gly Leu Cys Pro Leu Leu Val Leu Trp Ile Ser 1 5 10 15

Gly His Leu His Cys Ile Ser Ala Leu Leu Gln Glu Arg Gly Val Gly
20 25 30

Val Ser Leu Ser Ser Arg Ser Asp Ala Cys Lys Ala Ala His Arg Ile 35 40 45

Gly Thr Ser Ser Ser

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<210> 89
<211> 422
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (277)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (278)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 89
Met Ile Tyr Lys Met Asp Cys Leu Xaa Arg Val Glu Asn Phe Leu Glu
Pro Leu Xaa Asn Trp Asn Glu Ala Trp Arg Glu Tyr Asp Lys Leu Glu
Tyr Asp Val Thr Xaa Thr Arg Asn Gln Met Gln Glu Gln Leu Asp His
Leu Gly Glu Val Gln Thr Glu Ser Ala Gly Ile Gln Arg Ala Gln Ile
Gln Lys Glu Leu Trp Arg Ile Gln Asp Val Met Glu Gly Leu Ser Lys
His Lys Gln Gln Arg Gly Thr Thr Glu Ile Gly Met Ile Gly Ser Lys
Pro Phe Ser Thr Val Lys Tyr Lys Asn Glu Gly Pro Asp Tyr Arg Leu
                                105
Tyr Lys Ser Glu Pro Glu Leu Thr Thr Val Ala Glu Val Asp Glu Ser
        115
Asn Gly Glu Glu Lys Ser Glu Pro Val Ser Glu Ile Glu Thr Ser Val
                        135
```

Val Lys Gly Ser His Phe Pro Val Gly Val Val Pro Pro Arg Ala Lys
145 150 155 160

Ser Pro Thr Pro Glu Ser Ser Thr Ile Ala Ser Tyr Val Thr Leu Arg 165 170 175

Lys Thr Lys Lys Met Met Asp Leu Arg Thr Glu Arg Pro Arg Ser Ala 180 185 190

Val Glu Gln Leu Cys Leu Ala Glu Ser Thr Arg Pro Arg Met Thr Val 195 200 205

Glu Glu Gln Met Glu Arg Ile Arg Arg His Gln Gln Ala Cys Leu Arg 210 215 220

Glu Lys Lys Lys Gly Leu Asn Val Ile Gly Ala Ser Asp Gln Ser Pro 225 230 235 240

Leu Gln Ser Pro Ser Asn Leu Arg Asp Asn Pro Phe Arg Thr Thr Gln 245 250 255

Thr Arg Arg Asp Asp Lys Glu Leu Asp Thr Ala Ile Arg Glu Asn 260 265 270

Asp Val Lys Pro Xaa Xaa Glu Thr Pro Ala Thr Glu Ile Val Gln Leu 275 280 285

Lys Glu Thr Glu Pro Gln Asn Val Asp Phe Ser Lys Glu Leu Lys Lys 290 295 300

Thr Glu Asn Ile Ser Tyr Glu Met Leu Phe Glu Pro Glu Pro Asn Gly 305 310 315 320

Val Asn Ser Val Glu Met Met Asp Lys Glu Arg Asn Lys Asp Lys Met 325 330 335

Pro Glu Asp Val Thr Phe Ser Pro Gln Asp Glu Thr Gln Thr Ala Asn 340 345 350

His Lys Pro Glu Glu His Pro Glu Glu Asn Thr Lys Asn Ser Val Asp 355 360 365

Glu Gln Glu Glu Thr Val Ile Ser Tyr Glu Ser Thr Pro Glu Val Ser 370 375 380

Arg Gly Asn Gln Thr Met Ala Val Lys Ser Leu Ser Pro Ser Pro Glu 385 390 395 400

Ser Ser Ala Ser Pro Val Pro Ser Thr Gln Pro Gln Leu Thr Glu Gly
405 410 415

Ser His Phe Met Cys Val 420

<210> 90

<211> 89

<212> PRT

<213> Homo sapiens

<400> 90

Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp Gln 1 5 10 15

Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val Gly Ser 20 25 30

Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val Lys Gln Val 35 40 45

Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu Val Thr Ile Gln 50 55 60

Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn Arg Asn Arg Glu Arg 65 70 75 80

Val Asp Phe Pro Asp Gly Ala Thr Pro

<210> 91

<211> 110

<212> PRT

<213> Homo sapiens

<400> 91

Met Val Leu Cys Leu Leu Leu Val Pro Leu Leu Ser Leu Phe 1 5 10 15

Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln Glu Glu 20 25 30

Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu Thr Pro Asn 35 40 45

Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp Thr Ile Pro His 50 55 60

Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala Asn Thr Val Tyr Ser 65 70 75 80

Thr Val Glu Ile Pro Lys Lys Met Glu Asn Pro His Ser Leu Leu Thr 85 90 95

Met Pro Asp Thr Pro Arg Leu Phe Ala Tyr Glu Asn Val Ile 100 105 110

<210> 92

<211> 72

<212> PRT

<213> Homo sapiens

<400> 92

Met Lys Phe Val Pro Cys Leu Leu Leu Val Thr Leu Ser Cys Leu Gly
1 5 10 15

Thr Leu Gly Gln Ala Pro Arg Gln Lys Gln Gly Ser Thr Gly Glu Glu 20 25 30

Phe His Phe Gln Thr Gly Gly Arg Asp Ser Cys Thr Met Arg Pro Ser

```
Ser Leu Gly Gln Gly Ala Gly Glu Val Trp Leu Arg Val Arg Leu Pro
50 55 60

Gln His Arg Pro Asp Leu Leu Val
65 70
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<210> 93
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)

<223> Xaa equals any of the naturally occurring L-amino acids

Tyr Gly Leu Ile Met Arg Pro Asn Asp Phe Ala Ser Tyr Leu Leu Ala 20 25 30

Ile Gly Ile Cys Asn Leu Leu Leu Tyr Phe Ala Phe Tyr Ile Ile Met 35 40 45

Lys Leu Arg Ser Gly Glu Arg Ile Lys Leu Ile Pro Leu Leu Cys Ile
50 60

Val Cys Thr Ser Val Val Trp Gly Phe Ala Leu Phe Phe Phe Gln
65 70 75 80

Gly Leu Ser Thr Trp Gln Lys Thr Pro Ala Glu Ser Arg Glu His Asn 85 90 95

Arg Asp Cys Ile Leu Leu Asp Phe Phe Asp Asp His Asp Ile Trp His
100 105 110

Phe Leu Ser Ser Ile Ala Met Phe Gly Ser Phe Leu Val Leu Leu Thr 115 120 125

Leu Asp Xaa Asp Leu Asp Thr Val Gln Xaa Asp Lys Ile Tyr Val Phe 130 135 140

<sup>&</sup>lt;210> 94

<sup>&</sup>lt;211> 144

<sup>&</sup>lt;212> PRT

<sup>&</sup>lt;213> Homo sapiens

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<221> SITE
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<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (138)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 94

Met Val Leu Leu Val Met Gly Asn Val Ile Asn Trp Ser Leu Ala Ala 1 5 10 15

Tyr Gly Leu Ile Met Arg Pro Asn Asp Phe Ala Ser Tyr Leu Leu Ala 20 25 30

Ile Gly Ile Cys Asn Leu Leu Leu Tyr Phe Ala Phe Tyr Ile Ile Met 35 40 45 .

Lys Leu Arg Ser Gly Glu Arg Ile Lys Leu Ile Pro Leu Cys Ile 50 55 60

Val Cys Thr Ser Val Val Trp Gly Phe Ala Leu Phe Phe Phe Gln 65 70 75 80

Gly Leu Ser Thr Trp Gln Lys Thr Pro Ala Glu Ser Arg Glu His Asn 85 90 95

Arg Asp Cys Ile Leu Leu Asp Phe Phe Asp Asp His Asp Ile Trp His

Phe Leu Ser Ser Ile Ala Met Phe Gly Ser Phe Leu Val Leu Leu Thr 115 120 125

Leu Asp Xaa Asp Leu Asp Thr Val Gln Xaa Asp Lys Ile Tyr Val Phe 130 140

<210> 95

<211> 170

<212> PRT

<213> Homo sapiens

<400> 95

Met Ala Thr Ala Met Asp Trp Leu Pro Trp Ser Leu Leu Phe Ser 1 5 10 15

Leu Met Cys Glu Thr Ser Ala Phe Tyr Val Pro Gly Val Ala Pro Ile 20 25 30

Asn Phe His Gln Asn Asp Pro Val Glu Ile Lys Ala Val Lys Leu Thr 35 40 45

Ser Ser Arg Thr Gln Leu Pro Tyr Glu Tyr Tyr Ser Leu Pro Phe Cys
50 55 60

Gln Pro Ser Lys Ile Thr Tyr Lys Ala Glu Asn Leu Gly Glu Val Leu 65 70 75 80

Arg Gly Asp Arg Ile Val Asn Thr Pro Phe Gln Val Leu Met Asn Ser 85 90 95

Glu Lys Lys Cys Glu Val Leu Cys Ser Gln Ser Asn Lys Pro Val Thr 100 105 110

Leu Thr Val Glu Gln Ser Arg Leu Val Ala Glu Arg Ile Thr Glu Asp 115 120 125

Tyr Tyr Val His Leu Ile Ala Asp Asn Leu Pro Val Ala Thr Arg Leu 130 135 140

Glu Leu Tyr Ser Asn Arg Asp Ser Asp Asp Lys Lys Lys Glu Ser Asp 145 150 155 160

Ile Lys Trp Ala Ser Arg Trp Asp Thr Tyr 165 170

<210> 96

<211> 286

<212> PRT

<213> Homo sapiens

<400> 96

Met Ile Leu Ile Val Ile Phe Val Ala Met Leu Gly Met Leu Ser Pro 1 5 10 15

Ser Ser Arg Gly Ala Leu Met Thr Thr Ala Cys Phe Leu Phe Met Phe 20 25 30

Met Gly Val Phe Gly Gly Phe Ser Ala Gly Arg Leu Tyr Arg Thr Leu 35 40 45

Lys Gly His Arg Trp Lys Lys Gly Ala Phe Cys Thr Ala Thr Leu Tyr 50 55 60

Pro Gly Val Val Phe Gly Ile Cys Phe Val Leu Asn Cys Phe Ile Trp 65 70 75 80

Gly Lys His Ser Ser Gly Ala Val Pro Phe Pro Thr Met Val Ala Leu 85 90 95

Leu Cys Met Trp Phe Gly Ile Ser Leu Pro Leu Val Tyr Leu Gly Tyr 100 105 110

Tyr Phe Gly Phe Arg Lys Gln Pro`Tyr Asp Asn Pro Val Arg Thr Asn 115 120 125

Gln Ile Pro Arg Gln Ile Pro Glu Gln Arg Trp Tyr Met Asn Arg Phe 130 135 140

Glu Leu Phe Phe Ile Phe Ser Ala Ile Trp Glu Asn Gln Phe Tyr Tyr
165 170 175

Leu Phe Gly Phe Leu Phe Leu Val Phe Ile Ile Leu Val Val Ser Cys
180 185 190

Ser Gln Ile Ser Ile Val Met Val Tyr Phe Gln Leu Cys Ala Glu Asp 195 200 205

Tyr Arg Trp Trp Trp Arg Asn Phe Leu Val Ser Gly Gly Ser Ala Phe 210 215 220

Tyr Val Leu Val Tyr Ala Ile Phe Tyr Phe Val Asn Lys Leu Asp Ile 225 230 235 240

Val Glu Phe Ile Pro Ser Leu Leu Tyr Phe Gly Tyr Thr Ala Leu Met 245 250 255

Val Leu Ser Phe Trp Leu Leu Thr Gly Thr Ile Gly Phe Tyr Ala Ala 260 270

Tyr Met Phe Val Arg Lys Ile Tyr Ala Ala Val Lys Ile Asp 275 280 285

<210> 97

<211> 435

<212> PRT

<213> Homo sapiens

<400> 97

Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly
1 5 10 15

Gln Gly Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly
20 -25 30

Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp 35 40 45

Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Gln Ala Glu
50 55 60

Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro 65 70 75 80

Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys
85 90 95

Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg 100 105 110

Thr Leu Val Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu 115 120 125

His Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser 130 135 140

Thr Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln
165 170 175

Lys Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp 180 185 190 Ser Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys 195 200 205

Leu Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro 210 215 220

Gly Ile Leu Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro 225 230 235 240

Thr Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr 245 250 255

Ser Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu 260 265 270

Val Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln 275 280 285 -

Val Gly Phe Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu 290 295 300

Gly Arg Gln Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala 305 310 315 320

Met Leu Asn Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile Ser Pro His

Gly Leu Glu Ala Arg Cys Asp Ala Ser Ser Phe Glu Ser Val Arg Cys 340 345 350

Thr Phe Cys Val Asp Ala Gly Val Trp Tyr Tyr Glu Val Thr Val Val 355 360 365

Thr Ser Gly Val Met Gln Ile Gly Trp Ala Thr Arg Asp Ser Lys Phe 370 375 380

Leu Asn His Glu Gly Tyr Gly Ile Gly Asp Asp Glu Tyr Ser Cys Ala 385 390 395 400

Tyr Asp Gly Cys Arg Gln Leu Ile Trp Tyr Asn Ala Arg Ser Lys Pro 405 410 415

His Ile His Pro Cys Trp Glu Arg Arg Arg Tyr Ser Arg Ile Ser Val 420 425 430

Arg Leu Glu 435

<210> 98

<211> 426

<212> PRT

<213> Homo sapiens

<400> 98

Met Ile Val Phe Gly Trp Ala Val Phe Leu Ala Ser Arg Ser Leu Gly
1 5 10 15

Gln Gly Leu Leu Thr Leu Glu Glu His Ile Ala His Phe Leu Gly
20 25 30

Thr Gly Gly Ala Ala Thr Thr Met Gly Asn Ser Cys Ile Cys Arg Asp 35 40 45

Asp Ser Gly Thr Asp Asp Ser Val Asp Thr Gln Gln Gln Gln Ala Glu 50 55 60

Asn Ser Ala Val Pro Thr Ala Asp Thr Arg Ser Gln Pro Arg Asp Pro 65 70 75 80

Val Arg Pro Pro Arg Arg Gly Arg Gly Pro His Glu Pro Arg Arg Lys 85 90 95

Lys Gln Asn Val Asp Gly Leu Val Leu Asp Thr Leu Ala Val Ile Arg 100 105 110

Thr Leu Val Asp Asn Asp Gln Glu Pro Tyr Ser Met Ile Thr Leu His
115 120 125 .

Glu Met Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser Leu 130 135 140

Ile Arg Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr 145 150 155 160

Leu Leu Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys 165 170 175

Leu Thr Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser 180 185 190

Ser His Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu 195 200 205

Ala Glu Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly 210 215 220

Ile Leu Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr 225 230 235 240

. Val Met Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser 245 250 255

Glu Asn Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val 260 265 270

Thr Leu Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val 275 280 285

Gly Phe Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly 290 295 300

Arg Gln Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met 305 310 315 320

Leu Asn Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile Ser Pro His Gly 325 330 335

Leu Glu Ala Arg Cys Asp Ala Ser Ser Phe Glu Ser Val Arg Cys Thr 340 345 350

Phe Cys Val Asp Ala Gly Val Trp Tyr Tyr Glu Val Thr Val Val Thr 355 360 365

Ser Gly Val Met Gln Ile Gly Trp Val Thr Arg Asp Ser Lys Phe Leu 370 375 380

Asn His Glu Gly Tyr Gly Ile Gly Asp Asp Glu Tyr Ser Cys Ala Tyr 385 390 395 400

Asp Gly Cys Arg Gln Leu Ile Trp Tyr Asn Ala Arg Ser Ser Leu Thr 405 410 415

Tyr Thr His Ala Gly Lys Lys Glu Ile Gln
420 425

<210> 99

<211> 191

<212> PRT

<213> Homo sapiens

<400> 99

Met Cys Cys Ala Leu Phe Leu Leu Ile Leu Leu Thr Gly Val Leu Cys

1 10 15

His Arg Phe His Gly Leu Trp Tyr Met Lys Met Met Trp Ala Trp Leu 20 25 30

Gln Ala Lys Arg Lys Pro Arg Lys Ala Pro Ser Arg Asn Ile Cys Tyr 35 40 45

Asp Ala Phe Val Ser Tyr Ser Glu Arg Asp Ala Tyr Trp Val Glu Asn 50 55 60

Leu Met Val Gln Glu Leu Glu Asn Phe Asn Pro Pro Phe Lys Leu Cys 65 70 75 80

Leu His Lys Arg Asp Phe Ile Pro Gly Lys Trp Ile Ile Asp Asn Ile 85 90 95

Ile Asp Ser Ile Glu Lys Ser His Lys Thr Val Phe Val Leu Ser Glu 100 105 110

Asn Phe Val Lys Ser Glu Trp Cys Lys Tyr.Glu Leu Asp Phe Ser His 115 120 125

Phe Arg Leu Phe Asp Glu Asn Asn Asp Ala Ala Ile Leu Ile Leu Leu 130 135 140

Lys Ile Met Asn Thr Lys Thr Tyr Leu Glu Trp Pro Met Asp Glu Ala 165 170 175

Gln Arg Glu Gly Phe Trp Val Asn Leu Arg Ala Ala Ile Lys Ser 180 185 190

<210> 100

<211> 163

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<212> PRT
<213> Homo sapiens
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<400> 100

Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala Leu Cys

1 10 15

Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys Ala Ala 20 25 30

Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly Thr Ala 35 40 45

Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Trp Gly Arg Gly Phe Gly
50 55 60

Leu Val Glu His Val Leu Gly Gln Asp Ser Ile Leu Asn Gln Ser Asn 65 70 75 .80.

Ser Ile Phe Gly Cys Ile Phe Tyr Thr Leu Gln Leu Leu Gly Cys 85 90 95

Leu Arg Thr Arg Trp Ala Ser Val Leu Met Leu Leu Ser Ser Leu Val
100 105 110

Ser Leu Ala Gly Ser Val Tyr Leu Ala Trp Ile Leu Phe Phe Val Leu 115 120 125

Tyr Asp Phe Cys Ile Val Cys Ile Thr Thr Tyr Ala Ile Asn Val Ser 130 135 140

Lys Arg His

<210> 101 <211> 92 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 101

Met Gly Ser Thr Trp Gly Ser Pro Gly Trp Val Arg Leu Ala Leu Cys

1 10 15

Leu Thr Gly Leu Val Leu Ser Leu Tyr Ala Leu His Val Lys Ala Ala
20 25 30

Arg Ala Arg Asp Arg Asp Tyr Arg Ala Leu Cys Asp Val Gly Thr Ala

40 35 45 Ile Ser Cys Ser Arg Val Phe Ser Ser Arg Leu Pro Xaa Asp Thr Leu 55 Gly Leu Cys Xaa Asp Ala Ala Glu Leu Pro Gly Val Ser Arg Trp Phe Cys Leu Pro Gly Leu Asp Pro Val Leu Arg Ala Leu <210> 102 <211> 52 <212> PRT <213> Homo sapiens <400> 102 Met Tyr Leu Lys Cys Ala Ile Leu Leu Ser Glu Val Cys Pro Val Phe Cys Tyr Asn Ser Phe Ser Val Arg Leu Gln Cys Gln Gln Leu Leu Pro His Ser Cys Gln Leu Lys His Lys Cys Tyr Arg Leu Ser Phe Leu 40 Lys Lys Lys 50 <210> 103 <211> 323 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <400> 103 Ser Pro Thr Ala Arg Arg Pro Leu Ala Gly Ala Leu Pro Gly Arg Leu Ala Trp His Leu Leu Phe His His Arg Asn Leu Glu Arg Gly Ile Arg Arg Pro Asp Trp Arg Ala Arg Leu Glu Pro Ala Gly Ala Arg Gly Trp Gln Ala Ala Leu Gly Ser Arg Arg Pro Trp Ala Arg Asn Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Xaa Arg Ala Arg Cys Glu Pro

70

75

Pro Ala Val Gly Xaa Ala Cys Thr Arg Leu Cys Arg Pro Arg Ser Ala 85 90 95

Pro Ser Arg Cys Gly Pro Gly Leu Arg Pro Cys Ala Pro Leu Glu Ala 100 105 110

Glu Cys Glu Ala Pro Pro Val Cys Arg Ala Gly Cys Ser Pro Glu His 115 120 125

Gly Phe Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu Glu Gly Trp Thr 130 135 140

Gly Pro Leu Cys Thr Val Pro Val Ser Thr Ser Ser Cys Leu Ser Pro 145 150 155 160

Arg Gly Pro Ser Ser Ala Thr Thr Gly Cys Leu Val Pro Gly Pro Gly 165 170 175 -

Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser Cys Ser Glu Thr 180 185 190

Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe Tyr Gly Leu Arg

Cys Glu Val Ser Gly Val Thr Cys Ala Asp Gly Pro Cys Phe Asn Gly 210 215 220

Gly Leu Cys Val Gly Gly Ala Asp Pro Asp Ser Ala Tyr Ile Cys His 225 230 235 240

Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys Glu Lys Arg Val Asp Arg 245 250 255

Cys Ser Leu Gln Pro Cys Arg Asn Gly Gly Leu Cys Leu Asp Leu Gly 260 265 270

His Ala Leu Arg Cys Arg Cys Arg Ala Ala Ser Arg Val Leu Ala Ala 275 280 285

Ser Thr Thr Trp Thr Thr Ala Arg Ala Ala Pro Ala Leu Thr Ala Ala 290 295 300

Arg Val Trp Arg Ala Ala Ala Arg Thr Ala Ala Pro Ala Arg Trp Ala 305 310 315 320

Ser Ala Ala

<210> 104

<211> 44

<212> PRT

<213> Homo sapiens

<400> 104

Ser Pro Thr Ala Arg Arg Pro Leu Ala Gly Ala Leu Pro Gly Arg Leu
1 10 15

Ala Trp His Leu Leu Phe His His Arg Asn Leu Glu Arg Gly Ile Arg

```
Arg Pro Asp Trp Arg Ala Arg Leu Glu Pro Ala Gly
                              40
 <210> 105
 <211> 42
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (30)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
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 <222> (41)
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 Ala Arg Gly Trp Gln Ala Ala Leu Gly Ser Arg Arg Pro Trp Ala Arg
                   5
                                      10
 Asn Ile Gln Arg Ala Gly Ala Trp Glu Leu Arg Phe Ser Xaa Arg Ala
                                  25
 Arg Cys Glu Pro Pro Ala Val Gly Xaa Ala
<210> 106
 <211> 44
 <212> PRT
 <213> Homo sapiens
 <400> 106
 Cys Thr Arg Leu Cys Arg Pro Arg Ser Ala Pro Ser Arg Cys Gly Pro
Gly Leu Arg Pro Cys Ala Pro Leu Glu Ala Glu Cys Glu Ala Pro Pro
                                  25
 Val Cys Arg Ala Gly Cys Ser Pro Glu His Gly Phe
 <210> 107
 <211> 44
 <212> PRT
 <213> Homo sapiens
 <400> 107
 Cys Glu Gln Pro Gly Glu Cys Arg Cys Leu Glu Gly Trp Thr Gly Pro
 Leu Cys Thr Val Pro Val Ser Thr Ser Ser Cys Leu Ser Pro Arg Gly
 Pro Ser Ser Ala Thr Thr Gly Cys Leu Val Pro Gly
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40

<210> 108 <211> 44

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<212> PRT
 <213 > Homo sapiens
 <400> 108
 Pro Gly Pro Cys Asp Gly Asn Pro Cys Ala Asn Gly Gly Ser Cys Ser
 Glu Thr Pro Arg Ser Phe Glu Cys Thr Cys Pro Arg Gly Phe Tyr Gly
 Leu Arg Cys Glu Val Ser Gly Val Thr Cys Ala Asp
 <210> 109
 <211> 44
 <212> PRT
 <213> Homo sapiens
 <400> 109
 Gly Pro Cys Phe Asn Gly Gly Leu Cys Val Gly Gly Ala Asp Pro Asp
 Ser Ala Tyr Ile Cys His Cys Pro Pro Gly Phe Gln Gly Ser Asn Cys
 Glu Lys Arg Val Asp Arg Cys Ser Leu Gln Pro Cys
 <210> 110
 <211> 42
 <212> PRT
 <213> Homo sapiens
 <400> 110
Arg Asn Gly Gly Leu Cys Leu Asp Leu Gly His Ala Leu Arg Cys Arg
 Cys Arg Ala Ala Ser Arg Val Leu Ala Ala Ser Thr Thr Trp Thr Thr
                                  25
 Ala Arg Ala Ala Pró Ala Leu Thr Ala Ala
 <210> 111
 <211> 19
 <212> PRT
 <213> Homo sapiens
 <400> 111
 Arg Val Trp Arg Ala Ala Ala Arg Thr Ala Ala Pro Ala Arg Trp Ala
   1
                                      10
                                                           15
 Ser Ala Ala
```

<210> 112 <211> 29 <212> PRT <213> Homo sapiens <400> 112 Lys Gln Ser Ser Leu Pro Cys Cys Arg Glu Pro Tyr Phe Leu Pro Leu Gln Leu Ser His Leu Leu Ser Gly Leu Pro Ala <210> 113 <211> 21 <212> PRT <213> Homo sapiens <400> 113 Leu Val Pro Leu Val Phe Ser Leu Leu Val Gln Ser Cys Lys Gln Val Tyr Arg Ser Ile Ala <210> 114 <211> 272 <212> PRT <213> Homo sapiens <400> 114 Met Val Val Cys Gln Gly Glu Val Arg Ser Val Gly Val Phe His Leu Ser Pro Ser Glu Glu Ala Asp Glu Lys Gly Ala Gln Gly Leu Glu Gly . Phe Pro Thr Met Phe Pro Gly Leu Leu Cys Phe Leu Ile Pro Ser Gly Pro Gly Ser Arg Leu Gly Arg Phe Gly Cys Gly Ser Gly Gly Gly Phe Gly Phe Ser Gln Leu Phe His Arg Val Leu Ser Gln Leu Cys Cys Phe Cys Glu Phe His Cys Gly Leu Gly Pro Gln Arg Trp Arg Pro Ser 85 Leu Arg Leu Leu Val Gly Leu Trp Ala Ala Leu Glu Ala Gly Ser His 100 Leu Leu His Met Gly Leu Gly Ser Ser Leu Pro Ala His Gly Trp Pro 115 120 Lys His Arg Gly Pro Leu Ala Arg Met Val Lys Ala Pro Gln Leu Leu 130 135 140

His Ala Gly Leu Pro Pro Val Leu Thr Pro Val Gly Leu Val Cys Val 165 170 175

Ala Ala Val Asp Ala Lys Pro Asp Phe Ser Ser Thr Leu Pro Gln Ala 180 185 190

Ala Gly Thr His Ser Ala Gly Ile Ser Pro Ser Ser Leu Glu Met Glu
195 200 205

Phe Leu Pro Ser Ala Ser Leu Leu Leu Pro Arg Gly Leu Thr Gln Ser 210 215 220

Pro Gln Ala Gly Gln Gly His Gln Gln Glu Ala Gly Asp Glu Leu His 225 230 235 240

Gly Asp Thr Pro Ile Asn Leu Leu Ala Thr Leu His Gln Glu Arg Glu 245 250 255

His Lys Trp Asp Glu Ser Pro Phe Lys Gly Cys Cys Thr Lys Ala Leu 260 265 270

<210> 115

<211> 69

<212> PRT

<213> Homo sapiens

<400> 115

Leu Leu Ser Ser Pro Phe Asp Cys Thr Gln Gly Ser Gly Ala Trp Ala 1 5 10 15

Leu Gly Gly Tyr Gln Gln Leu Leu Ala Val Pro Met Ser Ser Leu Gln 20 25 30

Leu Cys Cys Val Ser Leu Leu Pro Asn Leu Ser Asp Cys Glu Arg Thr

Leu Cys Leu Ser His Gly Gln Pro Leu Ala Gly Pro Leu Ile Cys Pro 50 55 60

Pro Ser Ile Val Trp 65

<210> 116

<211> 51

<212> PRT

<213> Homo sapiens

<400> 116

Gly Cys Arg Asn Ser Ala Arg Ala Arg Ala Asp Ser Gln Ser Arg Glu
1 10 15

Gln Arg Gly Lys Met Phe Thr Leu His Ala Gln Ser Val Leu Pro Val 20 25 30 Pro His Pro Met Trp Pro Asn Ser Trp Leu Asp Phe Thr Leu Asn Trp 40 Tyr Phe Phe 50 <210> 117 <211> 59 <212> PRT <213> Homo sapiens <400> 117 Leu Pro Ser Ser Pro Ala Pro Thr Asp Ser Ser Pro Leu Pro Leu Ile Val Leu Lys Val Leu Gly Pro Gly Pro Trp Val Gly Thr Asn Ser Cys-25 Ser Leu Phe Pro Cys Pro Leu Ser Ser Phe Ala Val Phe Leu Cys Tyr Leu Ile Ser Val Thr Val Lys Gly His Cys Val 50 <210> 118 <211> 65 <212> PRT <213> Homo sapiens <400> 118 Ala Ala Gly Ile Arg His Glu Leu Val Pro Thr Leu Arg Ala Gly Asn Ser Gly Gly Lys Cys Leu His Ser Met His Asn Leu Cys Phe Gln Ser Leu Thr Leu Cys Gly Pro Ile Ala Gly Trp Ile Ser His Leu Ile Gly 35 Ile Phe Phe Cys Leu Leu Pro Leu Pro Pro Leu Thr Pro Leu Leu Ser 55 Leu 65 <210> 119 <211> 24 <212> PRT <213> Homo sapiens <400> 119 Ser Phe Pro Val Gln Val Leu Glu Val Ser Gly Arg Arg Val Leu Pro 5 10

Ala Gly Ser Phe Glu Ser His Gln
20

```
<210> 120
<211> 49
<212> PRT
<213> Homo sapiens
<400> 120
Asp Val Leu Cys Pro Val Tyr Asp Leu Asp Asn Asn Val Ala Phe Ile
Gly Met Tyr Gln Thr Met Thr Lys Lys Ala Ala Ile Thr Val Gln Arg
                                 25
Lys Asp Phe Pro Ser Asn Ser Phe Tyr Val Val Val Val Lys Thr
                             40
Glu
<210> 121
<211> 44
<212> PRT
<213> Homo sapiens
<400> 121
Asp Gln Ala Cys Gly Gly Ser Leu Pro Phe Tyr Pro Phe Ala Glu Asp
Glu Pro Val Asp Gln Gly His Arg Gln Lys Thr Leu Ser Val Leu Val
Ser Gln Ala Val Thr Ser Glu Ala Tyr Val Ser Gly
<210> 122
<211> 143
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (90)
<223> Kaa equals any of the naturally occurring L-amino acids
<400> 122
Ser Ser Thr Arg Ser Gly Thr Arg Thr Ser Thr Xaa Ala Xaa Thr Val
                  5
Pro Thr Pro Ala Trp Pro Leu Ser Ser Ser Leu Cys Trp Ala Trp
```

<400> 124

25 30 20 Ser Leu Ala Lys Gly Thr Arg Arg Ser Gly Ser Ser Ser Pro Ser Phe 40 Thr Ser Ser Pro Pro Cys Ser Ser Ala Arg Ser Ser Ile Thr Trp Ala Gly Gly Asn Trp Thr Arg Gly Ser Ser Ala Ala Ser Ser Thr Cys Ser Thr Gln Thr Ala Ser Gly Ser Ala Ala Xaa Pro Leu Tyr Val Asp Arg Met Val Leu Leu Val Met Gly Asn Val Ile Asn Trp Ser Leu Ala Ala 105 Tyr Gly Leu Ile Met Arg Pro Asn Asp Phe Ala Ser Tyr Leu Leu Ala-120 115 Ile Gly Ile Cys Asn Leu Leu Leu Tyr Phe Ala Phe Tyr Ile Ile 135 <210> 123 <211> 46 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids . Ser Ser Thr Arg Ser Gly Thr Arg Thr Ser Thr Xaa Ala Xaa Thr Val Pro Thr Pro Ala Trp Pro Leu Ser Ser Ser Leu Cys Trp Ala Trp 20 Ser Leu Ala Lys Gly Thr Arg Arg Ser Gly Ser Ser Ser Pro 35 <210> 124 <211> 46 <212> PRT <213> Homo sapiens <220> <221> SITE <223> Xaa equals any of the naturally occurring L-amino acids

```
Ser Phe Thr Ser Ser Pro Pro Cys Ser Ser Ala Arg Ser Ser Ile Thr
                  5
                                      10
Trp Ala Gly Gly Asn Trp Thr Arg Gly Ser Ser Ala Ala Ser Ser Thr
 Cys Ser Thr Gln Thr Ala Ser Gly Ser Ala Ala Xaa Pro Leu
 <210> 125
 <211> 51
 <212> PRT
 <213> Homo sapiens
 <400> 125
 Tyr Val Asp Arg Met Val Leu Leu Val Met Gly Asn Val Ile Asn Trp
 Ser Leu Ala Ala Tyr Gly Leu Ile Met Arg Pro Asn Asp Phe Ala Ser
 Tyr Leu Leu Ala Ile Gly Ile Cys Asn Leu Leu Leu Tyr Phe Ala Phe
                              40
Tyr Ile Ile
    50
<210> 126
<211> 37
 <212> PRT
<213> Homo sapiens
<220>
<221> SITE
 <222> (9)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <400> 126
. Glu Gly Gly Ser Ser Arg Ala Arg Xaa Ser Thr Ser Arg Arg Leu Gly
 Val Cys Ser Leu Phe Leu Leu Pro Gly Ser Thr Glu Gly Asn Gly Asp
 Leu Ser Glu Glu Lys
 <210> 127
 <211> 34
 <212> PRT
 <213> Homo sapiens
 <400> 127
 Ala Ser Leu Leu Ser Pro Gln Leu His Ser Ala Cys Ile Leu Ala Phe
 Ser Trp Arg Glu Ser Pro Ser Arg Ser Gly Thr Pro Ala Asp Leu Leu
```

25

20

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Cys Pro
```

```
<210> 128
```

<211> 141

<212> PRT

<213> Homo sapiens

<400> 128

Leu Leu Cys Cys Gln Leu Leu Gly Ser Pro Val Pro Ser Gly Gly Asp
1 5 - 10 15

Leu Pro Ala Ser Arg Ala Trp Ala Arg Val Arg Leu Pro Gly Gly Pro
20 25 30

Val Thr Cys Met Phe Gly His Thr Gly Ser Val Pro Ser Ala Leu Met 35 40 45

Leu Leu Trp Val Leu Pro Met Phe Cys Cys His Asp Arg His Phe Pro 50 55 60

Gly Cys Pro Met Trp His Leu Trp Val Pro Arg Val Ala Ser Val Gly
65 70 75 80

Ala Pro Cys Gly Val Ser Gly Cys Pro Val Trp Arg Leu Trp Val Pro 85 90 95

Arg Val Thr Ser Val Gly Ala Pro Cys Gly Ile Cys Ala Ala Met Ser 100 105 110

Gly Val Gln Ser Leu Asn Ser Lys Lys Gly Asp Ala Gly Ser Gln Val

Thr Ser Thr Tyr Asn Ser Asp Ser Cys Asp Lys Pro Ser 130 135 140

<210> 129

. <211> 38

<212> PRT

<213> Homo sapiens

<400> 129

Leu Leu Cys Cys Gln Leu Leu Gly Ser Pro Val Pro Ser Gly Gly Asp 1 5 10 15

Leu Pro Ala Ser Arg Ala Trp Ala Arg Val Arg Leu Pro Gly Gly Pro
20 25 30

Val Thr Cys Met Phe Gly

<210> 130

<211> 37

<212> PRT

<213> Homo sapiens

<400> 130

<221> SITE

```
His Thr Gly Ser Val Pro Ser Ala Leu Met Leu Leu Trp Val Leu Pro
 Met Phe Cys Cys His Asp Arg His Phe Pro Gly Cys Pro Met Trp His
 Leu Trp Val Pro Arg
         35
 <210> 131
 <211> 37
 <212> PRT
 <213> Homo sapiens
 <400> 131
 Val Ala Ser Val Gly Ala Pro Cys Gly Val Ser Gly Cys Pro Val Trp
 Arg Leu Trp Val Pro Arg Val Thr Ser Val Gly Ala Pro Cys Gly Ile
 Cys Ala Ala Met Ser
          35
 <210> 132
 <211> 29
 <212> PRT
 <213> Homo sapiens
 <400> 132
 Gly Val Gln Ser Leu Asn Ser Lys Lys Gly Asp Ala Gly Ser Gln Val
 Thr Ser Thr Tyr Asn Ser Asp Ser Cys Asp Lys Pro Ser
                                   25
              20
 <210> 133
. <211> 292
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
 <222> (14)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (239)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
 <221> SITE
 <222> (247)
 <223> Xaa equals any of the naturally occurring L-amino acids
 <220>
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<222> (249) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (258) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (265) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (282) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (290) <223> Kaa equals any of the naturally occurring L-amino acids <400> 133 Leu Ser Phe Gly Pro Ser Gly Arg Thr Leu Pro Thr Thr Xaa Arg Arg Met Thr Leu Lys Thr Pro Trp Arg Ser Leu Gly Gly Ser Trp Cys Thr Ala Thr Ser Ser Gly Pro Pro Gln Tyr Pro Met Ile Leu Ser Ser Leu Leu Gly Ser Gly Ile Gln Leu Phe Cys Met Ile Leu Ile Val Ile Phe Val Ala Met Leu Gly Met Leu Ser Pro Ser Ser Arg Gly Ala Leu Met Thr Thr Ala Cys Phe Leu Phe Met Phe Met Gly Val Phe Gly Gly Phe 85 Ser Ala Gly Arg Leu Tyr Arg Thr Leu Lys Gly His Arg Trp Lys Lys Gly Ala Phe Cys Thr Ala Thr Leu Tyr Pro Gly Val Val Phe Gly Ile 115 120 Cys Phe Val Leu Asn Cys Phe Ile Trp Gly Lys His Ser Ser Gly Ala Val Pro Phe Pro Thr Met Val Ala Leu Leu Cys Met Trp Phe Gly Ile 145 150 155 Ser Leu Pro Leu Val Tyr Leu Gly Tyr Tyr Phe Gly Phe Arg Lys Gln Pro Tyr Asp Asn Pro Val Arg Thr Asn Gln Ile Pro Arg Gln Ile Pro 190

Glu Gln Arg Trp Tyr Met Asn Arg Phe Val Gly Ile Leu Met Ala Gly

200 205 195 Ile Leu Pro Phe Gly Ala Met Phe Ile Glu Leu Phe Phe Ile Phe Ser 215 Ala Ile Trp Glu Asn Gln Phe Tyr Tyr Leu Phe Gly Phe Leu Xaa Leu 230 Gly Phe Ile Ile Leu Val Xaa Ser Xaa Ser Gln Ile Ser Ile Val Met 250 245 Val Xaa Phe Gln Leu Cys Ala Glu Xaa Leu Pro Leu Val Val Glu Lys - 265 260 Phe Pro Ser Leu Arg Gly Leu Cys Ile Xaa Arg Pro Gly Leu Cys His 280 Leu Xaa Phe Arg 290 <210> 134 <211> 45 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <400> 134 Leu Ser Phe Gly Pro Ser Gly Arg Thr Leu Pro Thr Thr Xaa Arg Arg Met Thr Leu Lys Thr Pro Trp Arg Ser Leu Gly Gly Ser Trp Cys Thr 20 Ala Thr Ser Ser Gly Pro Pro Gln Tyr Pro Met Ile Leu 40 <210> 135 <211> 47 <212> PRT <213> Homo sapiens <400> 135 Ser Ser Leu Leu Gly Ser Gly Ile Gln Leu Phe Cys Met Ile Leu Ile

<210> 136

<211> 47

<212> PRT

<222> (13)

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<213> Homo sapiens
<400> 136
Phe Gly Gly Phe Ser Ala Gly Arg Leu Tyr Arg Thr Leu Lys Gly His
Arg Trp Lys Lys Gly Ala Phe Cys Thr Ala Thr Leu Tyr Pro Gly Val
                                 25
Val Phe Gly Ile Cys Phe Val Leu Asn Cys Phe Ile Trp Gly Lys
<210> 137
<211> 46
<212> PRT
<213> Homo sapiens
<400> 137
His Ser Ser Gly Ala Val Pro Phe Pro Thr Met Val Ala Leu Leu Cys
Met Trp Phe Gly Ile Ser Leu Pro Leu Val Tyr Leu Gly Tyr Tyr Phe
Gly Phe Arg Lys Gln Pro Tyr Asp Asn Pro Val Arg Thr Asn
                             40
<210> 138
<211> 49
<212> PRT
<213> Homo sapiens
<400> 138
Gln Ile Pro Arg Gln Ile Pro Glu Gln Arg Trp Tyr Met Asn Arg Phe
Val Gly Ile Leu Met Ala Gly Ile Leu Pro Phe Gly Ala Met Phe Ile
Glu Leu Phe Phe Ile Phe Ser Ala Ile Trp Glu Asn Gln Phe Tyr Tyr
Leu
<210> 139
<211> 58
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 139
Phe Gly Phe Leu Xaa Leu Gly Phe Ile Ile Leu Val Xaa Ser Xaa Ser
Gln Ile Ser Ile Val Met Val Xaa Phe Gln Leu Cys Ala Glu Xaa Leu
             20
Pro Leu Val Val Glu Lys Phe Pro Ser Leu Arg Gly Leu Cys Ile Xaa
Arg Pro Gly Leu Cys His Leu Xaa Phe Arg
     50
<210> 140
<211> 276
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (223)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (231)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (233)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (242)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (266)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (274)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 140
Met Thr Leu Lys Thr Pro Trp Arg Ser Leu Gly Gly Ser Trp Cys Thr
Ala Thr Ser Ser Gly Pro Pro Gln Tyr Pro Met Ile Leu Ser Ser Leu
                                 25
Leu Gly Ser Gly Ile Gln Leu Phe Cys Met Ile Leu Ile Val Ile Phe
Val Ala Met Leu Gly Met Leu Ser Pro Ser Ser Arg Gly Ala Leu Met
Thr Thr Ala Cys Phe Leu Phe Met Phe Met Gly Val Phe Gly Gly Phe
Ser Ala Gly Arg Leu Tyr Arg Thr Leu Lys Gly His Arg Trp Lys Lys
Gly Ala Phe Cys Thr Ala Thr Leu Tyr Pro Gly Val Val Phe Gly Ile
            100
Cys Phe Val Leu Asn Cys Phe Ile Trp Gly Lys His Ser Ser Gly Ala
                             120
Val Pro Phe Pro Thr Met Val Ala Leu Leu Cys Met Trp Phe Gly Ile
                        135
    130
Ser Leu Pro Leu Val Tyr Leu Gly Tyr Tyr Phe Gly Phe Arg Lys Gln
                     150
Pro Tyr Asp Asn Pro Val Arg Thr Asn Gln Ile Pro Arg Gln Ile Pro
                165
                                     170
Glu Gln Arg Trp Tyr Met Asn Arg Phe Val Gly Ile Leu Met Ala Gly
Ile Leu Pro Phe Gly Ala Met Phe Ile Glu Leu Phe Phe Ile Phe Ser
                                                 205
Ala Ile Trp Glu Asn Gln Phe Tyr Tyr Leu Phe Gly Phe Leu Xaa Leu
```

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220
                        215
    210
Gly Phe Ile Ile Leu Val Xaa Ser Xaa Ser Gln Ile Ser Ile Val Met
                   230
                             235
225
Val Xaa Phe Gln Leu Cys Ala Glu Xaa Leu Pro Leu Val Val Glu Lys
                                    250
                245
Phe Pro Ser Leu Arg Gly Leu Cys Ile Xaa Arg Pro Gly Leu Cys His
                                265
Leu Xaa Phe Arg
        275
<210> 141
<211> 46
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu His Gly Ser Asn Asp
Pro Val Gly Leu Gln Arg Lys Gly Gly Xaa Glu Gly Arg Arg Gln Gly
                                 25
             20
Leu Pro His Trp Pro Pro Ser Gln Pro Gln Glu Pro Ser Pro
                             40
<210> 142
<211> 11
<212> PRT
<213> Homo sapiens
<400> 142
Gln Glu Phe Gly Thr Arg Arg Ala Gly Thr Gly
  1
<210> 143
<211> 16
<212> PRT
<213> Homo sapiens
<400> 143
Gly Thr Ser Asp Arg Ser Glu Leu Arg Pro Glu Gln Pro Ala Ser Gly
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<212> PRT <213> Homo sapiens

<400> 144

Met Glu Cys Leu Arg Ser Leu Pro Cys Leu Leu Pro Arg Ala Met Arg 1 5 10 15

Leu Pro Arg Arg Thr Leu Cys Ala Leu Ala Leu Asp Val Thr Ser Val 20 25 30

Gly Pro Pro Val Ala Ala Cys Gly Arg Arg Ala Asn Leu Ile Gly Arg 35 40 45

Ser Arg Ala Ala Gln Leu Cys Gly Pro Asp Arg Leu Arg Val Ala Gly 50 60

Glu Val His Arg Phe Arg Thr Ser Asp Val Ser Gln Ala Thr Leu Ala 65 70 75 80

Ser Val Ala Pro Val Phe Thr Val Thr Lys Phe Asp Lys Gln Gly Asn 85 90 95

Val Thr Ser Phe Glu Arg Lys Lys Thr Glu Leu Tyr Gln Glu Leu Gly
100 105 110

Leu Gln Ala Arg Asp Leu Arg Phe Gln His Val Met Ser Ile Thr Val 115 120 125

Arg Asn Asn Arg Ile Ile Met Arg Met Glu Tyr Leu Lys Ala Val Ile 130 135 140

Gln Trp Leu Phe Arg Glu Leu Pro Ser Gln Leu Ser Gly Glu Gly Gln 165 170 175

Leu Val Thr Tyr Pro Leu Pro Phe Glu Phe Arg Ala Ile Glu Ala Leu 180 185 190

. Leu Gln Tyr Trp Ile Asn Thr Leu Gln Gly Lys Leu Ser Ile Leu Gln 195 200 205

Pro Leu Ile Leu Glu Thr Leu Asp Ala Leu Val Asp Pro Lys His Ser 210 215 220

Ser Val Asp Arg Ser Lys Leu His Ile Leu Leu Gln Asn Gly Lys Ser 225 230 235 240

Leu Ser Glu Leu Glu Thr Asp Ile Lys Ile Phe Lys Glu Ser Ile Leu 245 250 255

Glu Ile Leu Asp Glu Glu Glu Leu Leu Glu Glu Leu Cys Val Ser Lys 260 265 270

Trp Ser Asp Pro Gln Val Phe Glu Lys Ser Ser Ala Gly Ile Asp His
275 280 285

Ala Glu Glu Met Glu Leu Leu Glu Asn Tyr Tyr Arg Leu Ala Asp 290 295 300 Asp Leu Ser Asn Ala Ala Arg Glu Leu Arg Val Leu Ile Asp Asp Ser 305 310 315 320

Gln Ser Ile Ile Phe Ile Asn Leu Asp Ser His Arg Asn Val Met Met 325 330 335

Arg Leu Asn Leu Gln Leu Thr Met Gly Thr Phe Ser Leu Ser Leu Phe 340 345 350

Gly Leu Met Gly Val Ala Phe Gly Met Asn Leu Glu Ser Ser Leu Glu 355 360 365

Glu Asp His Arg Ile Phe Trp Leu Ile Thr Gly Ile Met Phe Met Gly 370 375 380

Ser Gly Leu Ile Trp Arg Arg Leu Leu Ser Phe Leu Gly Arg Gln Leu 385 390 395 400

Glu Ala Pro Leu Pro Pro Met Met Ala Ser Leu Pro Lys Lys Thr Leu 405 410 415

Leu Ala Asp Arg Ser Met Glu Leu Lys Asn Ser Leu Arg Leu Asp Gly 420 425 430

Leu Gly Ser Gly Arg Ser Ile Leu Thr Asn Arg 435 440

<210> 145

<211> 10

<212> PRT

<213> Homo sapiens

<400> 145

Arg Ser Trp Gly Ala Pro Trp Phe Trp Arg
1 5 10

<210> 146

<211> 225

. <212> PRT

<213> Homo sapiens

<400> 146

Pro Leu Asn Thr Gln Ala Gly Lys Gly Leu Met Ser Val Val Pro Ile 1 5 10 15

Leu Glu Gly Gln Ala Leu Arg Ile Cys Ser Trp His Gly Ala Ala Ala 20 25 30

Pro Arg Pro Pro Gly Trp Pro Ser Arg Gly Ser Arg Gln Gln Val His
35 40 45

Gly Glu His Gly Pro Ala Ala Arg Val Leu Cys Gly Cys Gly Gly Arg
50 55 60

Gln Arg Gln Leu Pro Arg Arg Lys Ser Val Trp Ser Arg Leu Leu Gln
65 70 75 80

Ala Leu Glu Arg Gly Arg Glu Arg His Cys Val Arg Cys Gly Asn Gly

Thr Leu Pro Ala Tyr Asn Gly Ser Glu Cys Arg Ser Phe Ala Gly Pro 100 105 110

Gly Ala Pro Phe Pro Met Asn Arg Ser Ser Gly Thr Pro Gly Arg Pro 115 120 125

His Pro Gly Ala Pro Arg Val Ala Ala Ser Leu Phe Leu Gly Thr Phe 130 135 140

Phe Ile Ser Ser Gly Leu Ile Leu Ser Val Ala Gly Phe Phe Tyr Leu 145 150 155 160

Lys Arg Ser Ser Lys Leu Pro Arg Ala Cys Tyr Arg Arg Asn Lys Ala 165 170 175

Pro Ala Leu Gln Pro Gly Glu Ala Ala Ala Met Ile Pro Pro Pro Gln 180 185 190

Ser Ser Val Arg Lys Pro Arg Tyr Val Arg Arg Glu Arg Pro Leu Asp 195 200 205

Arg Ala Thr Asp Pro Ala Ala Phe Pro Gly Glu Ala Arg Ile Ser Asn 210 215 220

Val 225

<210> 147

<211> 46

<212> PRT

<213> Homo sapiens

<400> 147

Pro Leu Asn Thr Gln Ala Gly Lys Gly Leu Met Ser Val Val Pro Ile 1 5 10 15

Leu Glu Gly Gln Ala Leu Arg Ile Cys Ser Trp His Gly Ala Ala Ala 20 25 30

Pro Arg Pro Pro Gly Trp Pro Ser Arg Gly Ser Arg Gln Gln 35 40 45

<210> 148

<211> 46

<212> PRT

<213> Homo sapiens

<400> 148

Val His Gly Glu His Gly Pro Ala Ala Arg Val Leu Cys Gly Cys Gly 1 5 10 15

Gly Arg Gln Arg Gln Leu Pro Arg Arg Lys Ser Val Trp Ser Arg Leu 20 25 30

Leu Gln Ala Leu Glu Arg Gly Arg Glu Arg His Cys Val Arg
35 40 45

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<210> 149
 <211> 45
 <212> PRT
 <213> Homo sapiens
 <400> 149
 Cys Gly Asn Gly Thr Leu Pro Ala Tyr Asn Gly Ser Glu Cys Arg Ser
                 5
 Phe Ala Gly Pro Gly Ala Pro Phe Pro Met Asn Arg Ser Ser Gly Thr
                                  25
 Pro Gly Arg Pro His Pro Gly Ala Pro Arg Val Ala Ala
                              40
 <210> 150
 <211> 48
 <212> PRT
 <213> Homo sapiens
 <400> 150
 Ser Leu Phe Leu Gly Thr Phe Phe Ile Ser Ser Gly Leu Ile Leu Ser
 Val Ala Gly Phe Phe Tyr Leu Lys Arg Ser Ser Lys Leu Pro Arg Ala
 Cys Tyr Arg Arg Asn Lys Ala Pro Ala Leu Gln Pro Gly Glu Ala Ala
                              40
          35
 <210> 151
 <211> 40
 <212> PRT
 <213> Homo sapiens
. <400> 151
 Ala Met Ile Pro Pro Pro Gln Ser Ser Val Arg Lys Pro Arg Tyr Val
                                                           15
                                       10
 Arg Arg Glu Arg Pro Leu Asp Arg Ala Thr Asp Pro Ala Ala Phe Pro
 Gly Glu Ala Arg Ile Ser Asn Val
 <210> 152
 <211> 155
 <212> PRT
 <213> Homo sapiens
 <400> 152
 Cys Arg Asn Ser Ala Arg Asp Tyr Asn Thr Ser Glu Gln Asn Val Met
 Asp Tyr His Gly Ala Glu Ile Val Ser Leu Arg Leu Leu Ser Leu Val
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			20					25					30		
Lys	Glu	Glu 35	Phe	Leu	Phe	Leu	Ser 40	Pro	Asn	Leu	Asp	Ser 45	His	Gly	Leu
Lys	Су <b>s</b> 50	Ala	Ser	Ser	Pro	His 55	Gly	Leu	Val	Met	Val 60	Gly	Val	Ala	Gly
Thr 65	Val	His	Arg	Gly	Asn 70	Thr	Cys	Leu	Gly	Ile 75	Phe	Glu	Gln	Ile	Phe 80
Gly	Leu	Ile	Arg	Cys 85	Pro	Phe	Val	Glu	Asn 90	Thr	Trp	Lys	Ile	Lys 95	Phe
Ile	Asn	Leu	Lys 100	Ile	Met	Gly	Glu	Ser 105	Ser	Leu	Ala	Pro	Gly 110	Thr	Leu
Pro	Lys	Pro 115	Ser	Val	Lys	Phe	G1u 120	G1n	Ser	Asp	Leu	Glu 125	Ala	Phe	Tyr
Asn	Val 130	Ile	Thr	Val	Cys	G1y 135	Thr	Asn	Glu	Val	Arg 140	His	Asn	Val	Lys
Gln 145	Ala	Ser	Asp	Ser	Gly 150	Thr	Gly	Asp	Gln	Val 155					
<210> 153 <211> 43 <212> PRT <213> Homo sapiens															
<211 <212	L> 43 2> PI	3 RT	sapie	ens											
<211 <212 <213	L> 4: 2> PI 3> Ho 0> 1:	3 RT omo s	_												
<211 <212 <213	L> 4: 2> PI 3> Ho 0> 1:	3 RT omo s	_		Arg	Asp	Tyr	Asn	Thr	Ser	Glu	Gln	Asn	Val 15	Met
<211 <212 <213 <400 Cys	L> 43 2> PI 3> Ho 0> 19 Arg	3 RT omo : 53 Asn	Ser	Ala 5					10				Asn Ser 30	15	
<211 <212 <213 <400 Cys 1 Asp	L> 43 2> PI 3> Ho D> 19 Arg	RT DMO : 53 Asn His	Ser	Ala 5 Ala	Glu	Ile	Val	Ser 25	10 Leu	Arg			Ser	15	
<211 <212 <400 Cys 1 Asp Lys <210 <211 <211	1> 43 2> PP 3> Ho 0> 19 Arg Tyr Glu 0> 1 1> 4 2> P	3 RT DMO : 53 Asn His Glu 35	Ser Gly 20	Ala 5 Ala Leu	Glu	Ile	Val Ser	Ser 25	10 Leu	Arg			Ser	15	
<211 <212 <400 Cys 1 Asp Lys <210 <211 <211 <211	1> 43 2> PH 3> Ho 0> 1! Arg Tyr Glu 0> 1: 4: 2> PH 3> Ho 0> 1:	Glu 35 35 36 37 37 37 37 37 37 37 37	Ser Gly 20 Phe	Ala 5 Ala Leu	Glu	Ile	Val Ser 40	Ser 25 Pro	10 Leu Asn	Arg	Leu	Leu	Ser	15 Leu	Val

<210> 155 <211> 43

Phe Glu Gln Ile Phe Gly Leu Ile Arg Cys Pro 35 40

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<212> PRT
<213> Homo sapiens
<400> 155
Phe Val Glu Asn Thr Trp Lys Ile Lys Phe Ile Asn Leu Lys Ile Met
Gly Glu Ser Ser Leu Ala Pro Gly Thr Leu Pro Lys Pro Ser Val Lys
             20
Phe Glu Gln Ser Asp Leu Glu Ala Phe Tyr Asn
                              40
<210> 156
<211> 26
<212> PRT
<213> Homo sapiens
<400> 156
Val Ile Thr Val Cys Gly Thr Asn Glu Val Arg His Asn Val Lys Gln
Ala Ser Asp Ser Gly Thr Gly Asp Gln Val
<210> 157
<211> 26
<212> PRT
<213> Homo sapiens
 <400> 157
 Trp Met Ser Leu Thr Pro Pro Thr Pro Val Leu Phe Leu Phe Leu Ser
 1
 Leu Leu Trp Ala Arg Phe Phe Leu Ser Arg
              20
<210> 158
 <211> 23
 <212> PRT
 <213> Homo sapiens
 <400> 158
 Cys Trp Pro Leu Leu Ser Arg Gly Ser Ser Ala Ala Pro Trp Ala
                                      10
 Ser Val Pro Met Asp Gly Ala
 <210> 159
 <211> 25
 <212> PRT
 <213> Homo sapiens
 <400> 159
 Leu Pro Arg Gln Leu Ala Ser Pro Ser Ala Asn Thr Glu Leu Arg Val
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Leu Leu Pro Ala Arg Val Arg His
20 25
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<210> 160

<211> 119

<212> PRT

<213> Homo sapiens

<400> 160

Met Pro Leu His Leu Lys Ile Ser Gln Ala Trp Met Ser Leu Thr Pro 1 5 10 15

Pro Thr Pro Val Leu Phe Leu Phe Leu Ser Leu Leu Trp Ala Arg Phe 20 25 30

Phe Leu Ser Arg Leu Lys Cys Pro Gly Gly Cys Leu Cys Trp Pro Leu - 35 40 45

Leu Leu Ser Arg Gly Ser Ser Ala Ala Pro Trp Ala Ser Val Pro Met 50 55 60

Asp Gly Ala Ala His Ala Ala Ile Ser Ala Pro Gly Leu Ser Val Gln 65 70 75 80

Leu Leu Pro Arg Gln Leu Ala Ser Pro Ser Ala Asn Thr Glu Leu Arg 85 90 95

Val Leu Leu Pro Ala Arg Val Arg His Tyr Leu Pro Ser Ser Phe 100 105 110

His Gln Val Leu Gly Ser Ser 115

<210> 161

<211> 23

<212> PRT

<213> Homo sapiens

<400> 161

Thr Met Ala Thr Pro Leu Glu Asp Val Gly Lys Gln Val Gly Arg Ser

1 5 10 15

Cys Leu Leu Pro Val Ala Leu 20

<210> 162 <211> 17

<212> PRT

<213> Homo sapiens

<400> 162

Ala Thr Ala Glu Arg Glu Val Glu Ser Lys Gly Gln Ala Pro Trp Gly
1 5 10 15

Gln

<222> (21)

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<210> 163
<211> 206
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 163
Pro Pro Val Ser Ser Phe Arg Cys Glu Pro Asp Pro Arg Gly Arg Arg
Tyr Leu Gly Leu Xaa Val Phe Tyr Val Val Thr Val Ile Leu Cys Thr
Trp Ile Tyr Gln Arg Gln Arg Arg Gly Ser Leu Phe Cys Pro Met Pro
Val Thr Pro Glu Ile Leu Ser Asp Ser Glu Glu Asp Arg Val Ser Ser
Asn Thr Asn Ser Tyr Asp Tyr Gly Asp Glu Tyr Arg Pro Leu Phe Phe
Tyr Gln Glu Thr Thr Ala Gln Ile Leu Val Arg Ala Leu Asn Pro Leu
Asp Tyr Met Lys Trp Arg Arg Lys Ser Ala Tyr Trp Lys Ala Leu Lys
                                105
Val Phe Lys Leu Pro Val Glu Phe Leu Leu Leu Leu Thr Val Pro Val
Val Asp Pro Asp Lys Asp Asp Gln Asn Trp Lys Arg Pro Leu Asn Cys
                        135
Leu His Leu Val Ile Ser Pro Leu Val Val Leu Thr Leu Gln Ser
145
Gly Thr Tyr Gly Val Tyr Glu Ile Gly Gly Leu Val Pro Val Trp Val
                                     170
Val Val Val Ile Ala Gly Thr Ala Leu Ala Ser Val Thr Phe Phe Ala
 Thr Ser Asp Ser Gln Pro Pro Arg Leu His Trp Val Arg Asn
                             200
 <210> 164
 <211> 46
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> SITE
```

<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 164
Pro Pro Val Ser Ser Phe Arg Cys Glu Pro Asp Pro Arg Gly Arg Arg
Tyr Leu Gly Leu Xaa Val Phe Tyr Val Val Thr Val Ile Leu Cys Thr
Trp Ile Tyr Gln Arg Gln Arg Gly Ser Leu Phe Cys Pro
<210> 165
<211> 46
<212> PRT
<213> Homo sapiens
<400> 165
Met Pro Val Thr Pro Glu Ile Leu Ser Asp Ser Glu Glu Asp Arg Val
Ser Ser Asn Thr Asn Ser Tyr Asp Tyr Gly Asp Glu Tyr Arg Pro Leu
Phe Phe Tyr Gln Glu Thr Thr Ala Gln Ile Leu Val Arg Ala
                            40
<210> 166
<211> 45
<212> PRT
<213> Homo sapiens
<400> 166
Leu Asn Pro Leu Asp Tyr Met Lys Trp Arg Arg Lys Ser Ala Tyr Trp
Lys Ala Leu Lys Val Phe Lys Leu Pro Val Glu Phe Leu Leu Leu
Thr Val Pro Val Val Asp Pro Asp Lys Asp Asp Gln Asn
                            40
<210> 167
<211> 46
<212> PRT
<213> Homo sapiens
<400> 167
Trp Lys Arg Pro Leu Asn Cys Leu His Leu Val Ile Ser Pro Leu Val
Val Val Leu Thr Leu Gln Ser Gly Thr Tyr Gly Val Tyr Glu Ile Gly
```

Gly Leu Val Pro Val Trp Val Val Val Val Ile Ala Gly Thr
35 40 45

```
<211> 23
<212> PRT
<213> Homo sapiens
<400> 168
Ala Leu Ala Ser Val Thr Phe Phe Ala Thr Ser Asp Ser Gln Pro Pro
Arg Leu His Trp Val Arg Asn
             20
<210> 169
<211> 15
<212> PRT
<213> Homo sapiens
<400> 169
Thr Glu Lys Lys Thr Cys Ile Leu Gly Ile Asp Pro Ser His
<210> 170
<211> 50
<212> PRT
<213> Homo sapiens
<400> 170
Arg Pro Gly Thr Ala Ile Trp Val Val Glu Cys Glu His Gly Arg Pro
Ile Ala Glu Ser Glu Gly Gln Glu Gly Arg Gly His Ser Pro Pro Gly
Pro Cys Ser Val Ala Gly Phe Leu Arg Gly Arg Leu Gly Arg Asn Leu
Glu Ile
     50
<210> 171
<211> 69
<212> PRT
<213> Homo sapiens
<400> 171
Arg Arg Glu Ser Phe Lys Val Thr Gly Leu Gly Pro Ser Leu Asn Pro
Phe Pro His Pro Pro Asn Ser Pro Ser Pro Met Pro His Phe Leu Leu
                                 25
Leu Val Ala Lys Thr Ile Leu Ile Asn Ser Glu Met Asn Met Ser Pro
         35
                             40
Glu Tyr Ser Gln Thr Cys Leu Gln Asn Thr Ala Ile Gln His Pro Val
                         55
Ile Lys Glu Lys Asp
 65
```

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<210> 172
<211> 96
<212> PRT
<213> Homo sapiens
<400> 172
Met Pro His Phe Leu Leu Val Ala Lys Thr Ile Leu Ile Asn Ser
Glu Met Asn Met Ser Pro Glu Tyr Ser Gln Thr Cys Leu Gln Asn Thr
Ala Ile Gln His Pro Val Ile Lys Glu Lys Asp Met Gln Pro Trp Ala
Gly Leu Cys Pro Leu Leu Val Leu Trp Ile Ser Gly His Leu His Cys
Ile Ser Ala Leu Leu Glm Glu Arg Gly Val Gly Val Ser Leu Ser Ser
Arg Ser Asp Ala Cys Lys Ala Ala His Arg Ile Gly Thr Ser Ser Ser
<210> 173
<211> 27
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 173
Ala Ser Phe Ala Ile Ser Gln Pro Arg Asp Arg Asn Ala Cys Arg Tyr
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Pro Ala Ala Phe Arg Gln Trp Cys Xaa Lys Gly

20